

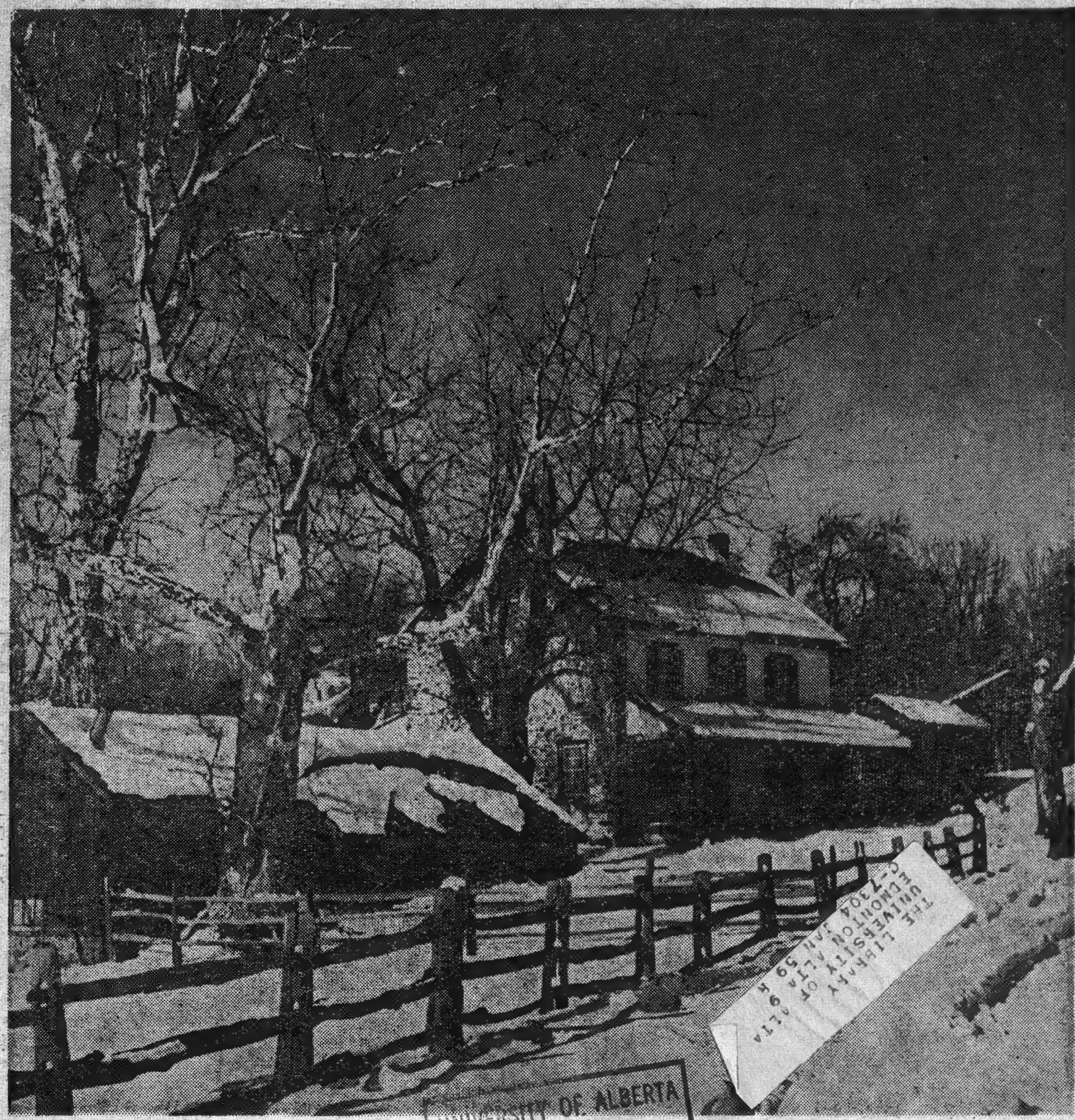
*Applied Science Reading Room*

APPLIED SCIENCE READING ROOM

# Farm and Ranch Review

VOLUME LIV.  
NUMBER 2

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CALGARY, ALBERTA  
FEBRUARY, 1958



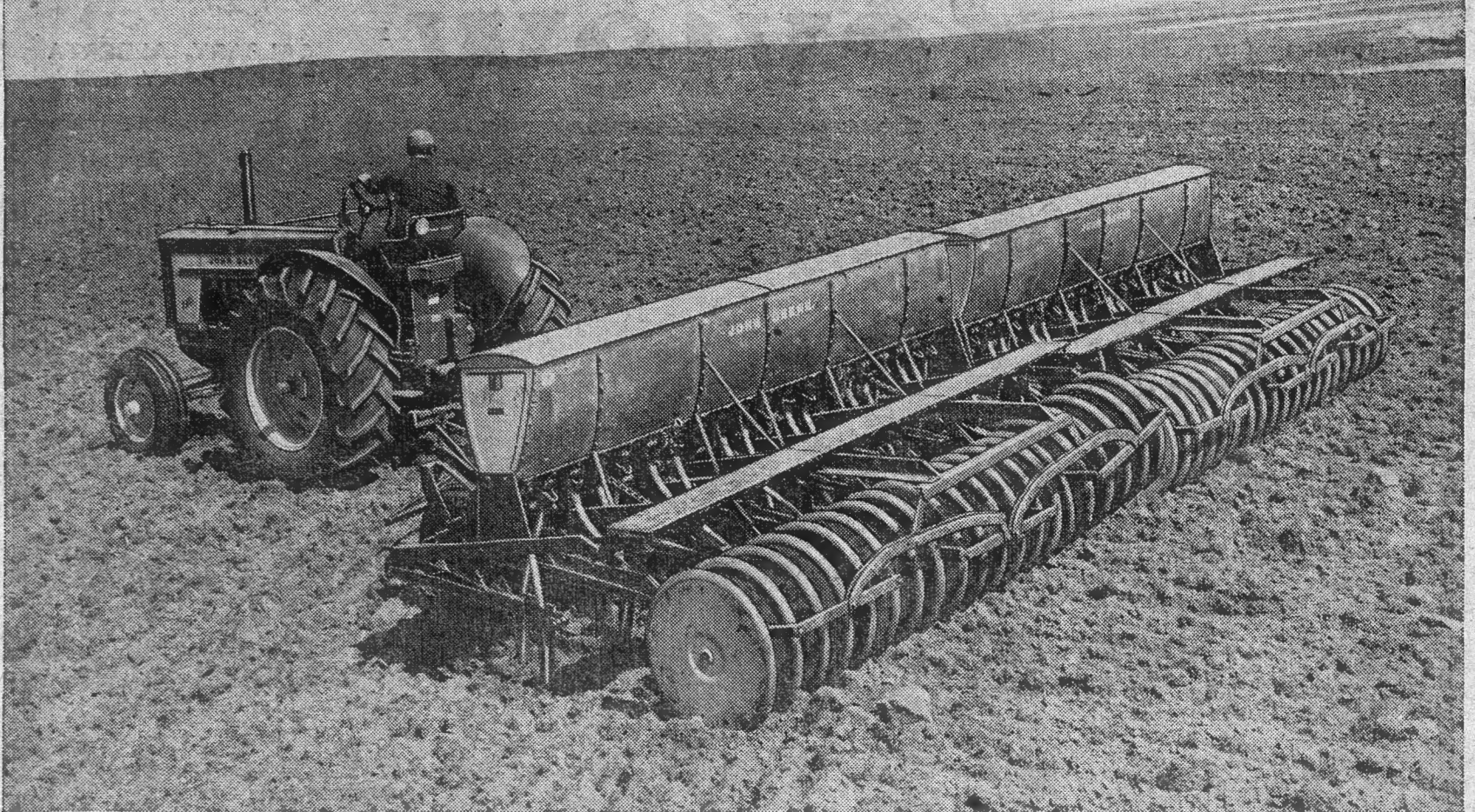
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- *Meet Mr. Nematode*
- *Irrigation Costs Money*
- *I Went To The Dogs*
- *The Outlook For '58*

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1958

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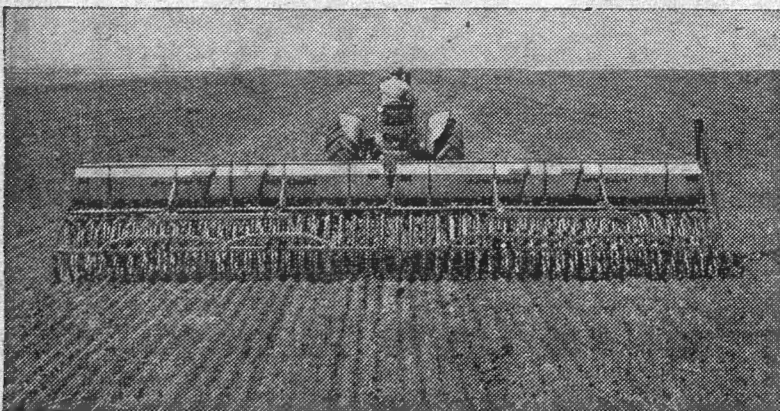
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# Farm and Ranch Review

Western Canada's Pioneer Agricultural Magazine

Vol. LIV.

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No. 2

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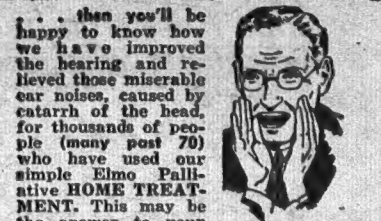
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# Editorials...

## No goose—no golden eggs

*A prosperous, expanding economy takes more than just high wages*

THE high-salaried labour leaders, sitting on top of the union pile have always chosen to ignore some fundamental facts of economic life . . . as long as they maintain their position as knights in shining armor leading the "down-trodden" membership to their promised union heaven. But this attitude is not really surprising when one realizes that they only pretend to be responsible businessmen, and as professional agitators are actually to be admired for the straightforward way they dodge the issues.

It was only last fall that the president of the United Automobile Workers had the door shut rudely in the face of wage demands that would have given the union privileges of ownership, without either the responsibilities or the risk. But undaunted, Walter Reuther is trying again.

His latest scheme would effectively dry up a company's earnings. He suggests that all earnings on capital above 10% and before taxes be distributed according to the union contract. The union, of course, is contributing nothing more to its side of the bargain. But the most serious danger is that Reuther is killing the goose that lays the golden eggs.

Unfortunately most members of the U.A.W are too busy turning out cars to allow much time to the study of high finance. If they did, or if their union leaders wanted to tell them, more of them would discover that the so-called "workers" aren't the only ones who work; that the man who takes the risks and shoulders the responsibilities is deserving of the privileges. The union leaders never bother to explain, for instance, that in any business — whether a farm business or a city business, a private business, a corporation or even a co-operative — all the earnings are not taken home in the pockets of management, owners or shareholders.

Every business must earn to succeed . . . more than that, it has a duty to succeed, and the cardinal measure of success is based on its earnings. It is only the successful business that provides the jobs, salaries, goods and services for the community, and in the long run the expansion of the economy.

Professional labour leaders have never explained to the rank and file the distinction between industrial and non-industrial investment. Salaries go to housing, food and services which are not themselves productive. But business earnings are productive and go into both expansion and modernization. It is only the earnings of a healthy business that can lead to growth with more and higher paid jobs, more and cheaper goods, more and better services, and more and better opportunities for everyone.

In the short period since the end of World War Two, the total capital investment in Canadian manufacturing industry has

climbed to \$10,000,000,000. This represents \$600 for every man, woman and child in Canada today and is greater than the whole national income for the year 1946.

This is not money put up by the individual workers or their unions. This was only possible through the earnings of business. As a result, fully 300,000 more Canadians now have jobs than in 1946.

In addition, earnings have permitted re-equipping and modernizing post-war factories which in turn have permitted increased production to keep up with higher salaries and shorter hours of work. (Unfortunately salaries keep ahead of production and the farmer must make up the difference in the high cost of the goods he buys.) Yet labour leaders are trying to dry up this supply of earnings which is priming Canada's economic pump.

This is fully understood by Reuther and his ilk, but conveniently ignored. They are using the rank and file to kill the goose that lays the golden egg.

## Financial box score

In 1955, while this country was enjoying the greatest economic boom in the Nation's history, only five per cent of Canada's farm population (just under 36,000 farmers) had enough cash income to pay income tax.

Agriculture has boosted production and cut costs more than any other industry, but it does not share the prosperity.

**Why is the farmer left out?**

## Somebody lay an egg?

ALBERTA'S Federation of Agriculture may have found a fly in the ointment of Alberta's election machinery.

It was discovered during the recent Egg Marketing Board Plebiscite, and since that time has pushed most other debate on the issue into the background.

We stated before and repeat again that the rules and plans for the plebiscite were established well in advance of actual voting. This included the registering of poultrymen automatically or by request. Although some promoters of the compulsory plan objected to the rules of the plebiscite, they forfeited the privilege to complain any further

when they agreed to go ahead with the voting on the terms stated

But since that time the issue has taken a new twist. The AFA now feels that once accepted, the rules were not adhered to — which is an entirely different thing. While there were objections to the enumeration machinery chosen, no one really thought that the machinery would break down.

The A.F.A. may have a very strong case. Egg Committee Chairman W. J. Harper told the recent convention that many eligible voters didn't receive ballots and other ineligible voters did; he has the names of others who received more than one ballot, and he reports that stacks of ballots were left unattended beside ballot boxes at some places, for anyone to help himself. His crowning argument is that the enumeration turned up 29,000 flock owners, which would be a 40% increase over the Dominion Bureau of Statistics figure for 1956. This difference becomes important when voters who were automatically registered didn't vote and they were counted against the plan.

If Mr. Harper's figures are correct — and he claims he can substantiate them — then the plebiscite is not only unfair but illegal.

Further than that, it casts suspicion on the validity of the liquor plebiscite. And for that matter, it casts suspicion on any election where enumerators have been employed.

The ball has now been tossed to Edmonton.

## Warning of pitfalls

ONE of the most interesting aspects of the publishing business is to open the mail in the morning and read the varied viewpoints of our readers. Some contain brickbats and others, bouquets, but at all times the exchange of ideas is interesting.

From time to time a reader will express dismay that we have played up the weaknesses of any farm scheme, but at the same time we, ourselves, have offered no solution to the farmers' difficulties.

It seems hardly necessary to state that if we knew the solution to farm problems we would be achieving something that has baffled the economic experts throughout the world. The best we can do is to search back through Man's experience and show just where and how similar schemes have miscarried. Why try solutions that lead only to deeper problems?

Farmers, above all, can think for themselves. But most farmers are busy farming and rely on radio and newspapers to do their tedious research for them. The job of the press is not to give orders, but to introduce the principles involved in any issue at point, to provide background that most farmers are unable to search for themselves, to provide a medium for exchange of ideas, to draw parallels and examples from the past and, above all, to warn the farmer of any pitfalls being placed in his way.

Many schemes are only short cuts to false solutions, leading to short-term successes at the expense of long-term failure. In gaining an inch one might lose a mile. Farmers as a group are, unfortunately, one of society's last ditch defenders making a

stand for the basic freedoms of the individual. It behooves them then to be careful lest they give away this freedom of individual action to anyone else. Compulsion is not the same thing as co-operation. In the words of John Stuart Mill, "Whatever crushes individuality is despotism, whatever name it may be called."

We are on the side of the individual.

## The same old game

SOME people, apparently, just can't take a hint . . . and while it's not nice to mention names, this includes the ruling class of the Liberal Party.

It is considered that one of the major causes of the defeat of the last Liberal government was a certain arrogance on the part of the leaders who pushed aside objections to their plans with the insolent and arrogant remark: "Who's to stop us?"

It's hard to believe, but it looks like they're at it again. At the recent television spectacle billed as the "National Liberal Convention," the Liberal leaders who had been consolidating their position of power over an uninterrupted period of 20 years, again pushed aside objections — not of the Loyal Opposition, but of their own delegates. Unfortunately, the Canadian public was not witness to the incidents which took place in the unrehearsed period when the television lights had blinked off.

It all started when a delegate from Renfrew South, Ontario — J. J. Green — urged that there be more representation in the party hierarchy from the constituency level. Then Irving Keith — a fiery Winnipeg lawyer gave voice to long simmering complaints of the delegates that the top echelon is far from close enough to grass roots opinion. He complained that there was little consideration given to the discussion of resolutions. That delegates had come to the convention — many from great distances and at considerable expense — only to be allowed to rubber stamp the mimeographed resolutions that had been prepared in advance by the very men who had been chased out of office for their contempt for the wishes of the people. Lester Pearson and his cohorts could have brought Old Trouper C. D. Howe into their television act and without even a rehearsal he could have fitted in the cast with one of his most famous lines — "Who's to stop us?"

The up-and-coming crop of smart Young Liberals might show them if they continue to press the point.

## Meddle to muddle

REGARDLESS of all the fancy legislation, the rosey promises of the socialists and the meddling in word markets, mankind has yet to discover a way to beat the law of supply and demand. The U.S. policies offer the most recent example.

After five years of state interference, and outlays of cash running into billions of dollars, the U.S. "planners" have found no way to market all the U.S. farmer can pro-

duce. They have not worked out any plan to curb excess production, nor have they devised a formula for improving the income of farm families.

In this five-year period, the U.S. has disposed of farm products worth \$12,000,000,000 by special cut-rate sales, give-aways and barter deals, and yet the U.S. Government still holds \$7,000,000,000 worth of surplus farm products. U.S. state planners have spent more than \$7,500,000,000 on a wide variety of plans to "stabilize" the income of farmers, yet income per farmer has dropped from \$2,789 in 1952 to \$2,430 in 1957. In the past two years planners have spent a billion dollars in the "soil bank" scheme to take land out of production, but since the plan has been in operation total crop production has equalled all previous records.

Several years ago a great world leader said:

"For three thousand years governments from ancient China to modern Russia, at intervals have meddled with the food supply. Whenever they have meddled, they have muddled. Out of 60 recorded experiments in price-fixing of grain, cited by the librarian of the Bureau of Economics of the U.S. Department of Agriculture, there is not one that has not ended in utter failure.

It is hoped that we have now absorbed the lesson, that no power on earth can influence grain prices except the farmers themselves. If wheat is economically over-produced, prices fall. If wheat is short, prices rise. And that is all there is to it."

Those — believe it or not — are the words of Sir Winston Churchill speaking in the year 1931. This certainly doesn't offer any solution to today's surplus problem, but it does point out that mankind has again failed his history lessons.

## Where does it stop?

THE CBC has cultivated such an insatiable thirst for the taxpayer's money that if somebody doesn't find a cork in a hurry it will be too late. The bottle will soon be empty at this rate, and the CBC is already drunk with power.

The extravagance in itself is cause for concern, but more serious in the long run is the fact that government appointees exposed to such temptation become increasingly difficult to handle and lose progressively both perspective and judgment. Even the new Conservative government is keeping at arms' length waiting for an opening to take away the bottle and put the troublemaker to bed.

Meantime the spree continues. The most recent illustration of completely unnecessary expense and empire building was the announcement that a T.V. delay station was to be moved from Winnipeg to Calgary. This station is a sort of exchange, designed to overcome the awkwardness caused by the many different time zones across the country. Television programs from either East or the West may be held at the exchange on an electronic tape for later broadcast at a more convenient time. The machines that do this job are a useful tool in the industry and are logically part of the national communications link.

But technically, there is absolutely no reason why the present station cannot remain at Winnipeg. The cost of equipping a Calgary exchange could easily run into hundreds of thousands of dollars.

The real reason for the unnecessary move is for the empire builders to expand—to take over more real estate, spend more money, increase their staffs, and get their finger into another community pie. The bigger their empire becomes, the more embarrassing and difficult it is for any government to admit its folly and cut it down to size. Having a stranglehold on the nation's communications media also makes the CBC a powerful political threat.

The Civil Service — like the army — bases a man's rank on the number of men under his command. Obviously, then, the way to gain power and succeed financially is to get more and more on your staff.

But while we talk, or write, the plans are unrolling at Edmonton in the usual pattern. The Edmonton staff is to be split to man the new Calgary exchange. This, of course, will result in two operations — Calgary and Edmonton — being listed as understaffed . . . so more bodies will have to be hired at either end and the empire grows a little bigger.

For those who think we may be calling undue alarm, look back at the ominous growth of the CBC. In the year 1932 there were already 68 private stations pioneering the broadcasting industry in Canada at no expense to the taxpayers. That was the year that the old Radio Broadcasting Commission (the parent of the CBC) was established to get the civil service into the picture. They were given the rather extravagant budget of \$800,000 to get established. They've been receiving further huge grants every year since.

Next year the CBC will cost Canadian taxpayers \$80,000,000 — a hundredfold increase, and growing all the time.

And who pays for it? You do!

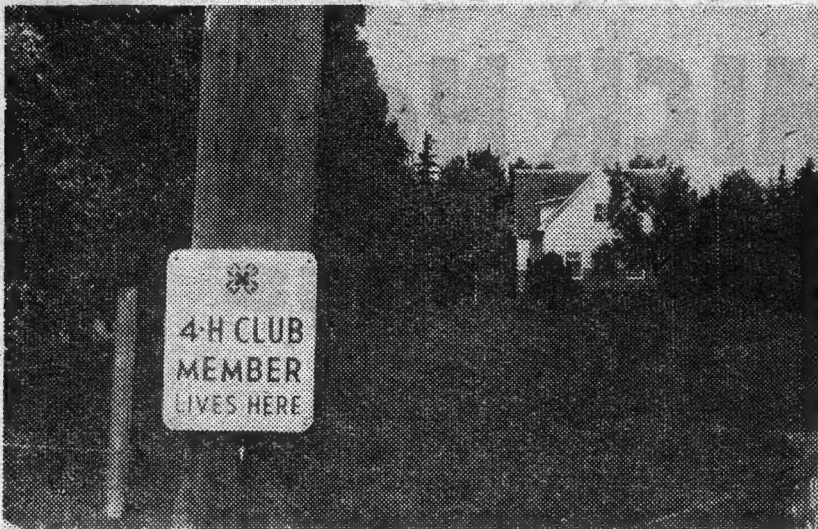
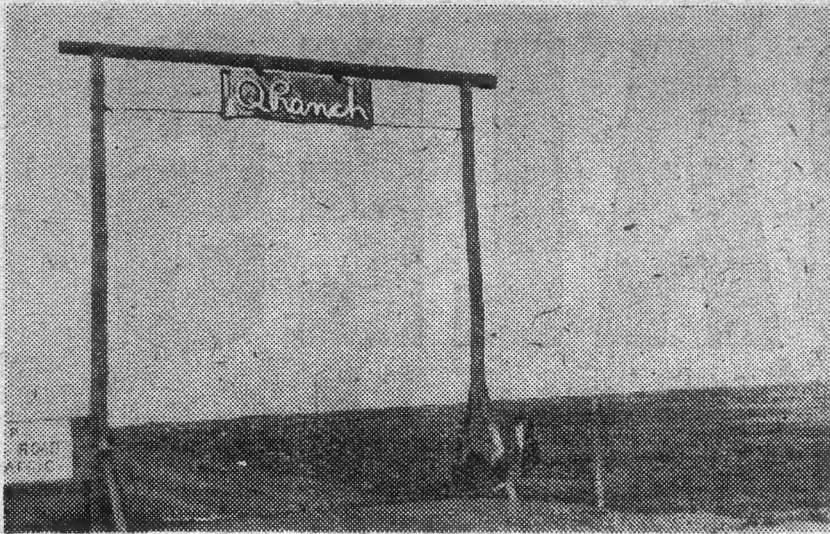
## Science can help

SCIENTISTS and not organizers could bring most stability to the farmers' markets.

The University of Wisconsin is taking out a patent on a process that will retain fresh milk's characteristics for several months without refrigeration. Inasmuch as the university has taken the commercial precaution to hold the patent, it must have some potential.

This could have far reaching results. Because of milk's perishable nature and fluctuations in its supply, the dairyman is at the mercy of an uncertain market unless he is ringed by protective rules and regulations that hinder almost as much as help. The process could relax these restrictions somewhat by reducing marketing costs, making distant markets more accessible, and equalizing prices.

This is the path toward more "orderly marketing" that would be much more palatable to all concerned than any system born of despair that exerts restraint or control over a farmer's freedom of initiative. More such discoveries would be welcomed.



Here is another group of farm gateways erected by men who have pride in their places. A little extra work during the slack period and plenty of imagination can result in an inviting entrance to set your farm or ranch out from your neighbor's.

There's no missing the entrance to the Q Ranch (top left) when driving on the open plains near Wild Horse, Alta. And the Malden Place

is well marked too (top right), even though the buildings are mostly hidden in the trees.

Junior has stolen the march on his dad with that bright sign outside the gateway of Hans Rae (lower left) farm near Bentley, Alta. While the small but distinctive sign of S. Kopas (lower right) identifies the man who keeps this imposing entrance as clean as a whistle.

Dress up your entrance and make sure the latch string is out.

## A little wheat— —a little chaff

by Ivan Helmer

The Farmer's Digest says, "there were just as many reckless drivers fifty years ago as there are now, but they were driving something that had more sense than they had."

An American mattress maker after a visit to Russia thinks the cold war would be over if Russian leaders slept on soft, spring-filled mattresses. The Kremlin leaders, he says, are cantankerous because they don't sleep well on their thin cotton-filled mattresses. Which proves that life is a vicious circle. We, on this continent, don't sleep well lately, because the Russians are cantankerous, because they don't sleep well.

If you have any black widow spiders in the cellar or the root-house don't throw them away. You can likely sell them to the U.S. Army Engineers who use their webs as cross hairs in telescopic gunsights.

A patient in an English hospital who fancied himself a vending machine had 424 coins removed from his stomach which he had deposited by mouth. No doubt his hallucination was brought on by the incessant demand of parking meter, vending machine, and railway rest-room slots for more and more coins. As an anti-climax the hospital declared the coins to be crown property and refused to return them to the patient for re-deposit.

The way the average man would like to have his wife dress is quicker.

Here is a bit of high class poetry pilfered from the Nanton News: Joe went to the Chinese theatre, Where the foot-prints of stars are enshrined, He fell and was pulled from the wet cement, Leaving prints of his own behind.

Readers planning a mortgage on a new car are warned to hold off for awhile. About 100 Rolls-Royce cars will be available in Canada this year. The cheap model, without air-conditioning, is only \$14,300. The bigger and better types sell up to around \$22,000. The latter is a luxury model and perhaps not suitable for lugging a sack of flour, a bale of hay, or a jag of coal. They are equipped for a chauffeur, though, and have a back-seat writing desk.

A woman-expert (as if there was such a thing) says a lot of women are not what they were in the forties — some of them are five or six years older.

George Bernard Shaw, or some noted scribbler, was told by a lady at a dinner that "Thackeray awoke one morning and found himself famous." At which our hero scoffed: "My dear lady," he said, "when that

morning dawned Thackeray had been writing a good many hours a day for fifteen years. The man who wakes up in the morning to find himself famous hasn't been sleeping."

Three years ago a sheep (wool-gathering perhaps) fell off a cliff on the coast of Australia. It landed unhurt on a 40-yard ledge which grows enough grass to graze it; fresh water trickles from the face of the cliff. The sheep's owner keeps trying to rescue it, but the ledge tucked under the cliff 200 feet down is practically inaccessible. It is doubtful if the sheep wants to be rescued anyway. Why should it? It has just about attained Utopia.

A great many men complain that their wives don't understand them. But they do understand them — it's just that they're tolerant.

Here is good news for the average person: a British lecturer remarked: "Surely even statisticians will admit that neither men or women will in real life conform to what we label 'the average woman', or 'the average man'. An average is not a person — it's the answer to a sum — something which needs to be remembered by other people than the Irish wife who refused to have more than two children, after learning that every third child born into the world was Chinese."

If you drive — don't drink; nobody, at today's prices, can afford to do both.

The rabbit not only brings the kid-dies Easter eggs, but an Ohio hunter claims that when he picked up a rabbit he had shot it had a 20-dollar

bill in its mouth. If ducks and geese would pick up this habit there would be considerable less domestic strife in a lot of Western Canada homes over the expense of hunting wild birds.

With most people a lot of relatives have been tried and found wanting.

Why raise your son to be a doctor at three or four bucks for a house call (if it's collected)? The fellow who calls about our automatic furnace, or the radio, or the washing machine charges \$5.00 for a service call — that's just for a look-see — anything else that he does, like taking its pulse, regulating its digestive system, etc., is extra, and it's cash on the barrel-head, with little or no bedside manner.

When do men who use electric razors wash their faces? You never seem to catch them at it.

Wonder if the poet, Rupert Hughes foresaw the Russian sputnik when he wrote (about 1907):

When the blood-red sun had gone burning down,  
And the lights were lit in the little town,  
Outside, in the gloom of the twilight gray,  
The little dog died when he'd had his day.

Sam Pollock, a BBC speaker, said on a broadcast: "My old mother was a leading exponent of the point of view that anything you enjoyed couldn't be good for you. She dated the decline and fall of the British Empire from the day they introduced castor-oil tablets coated with chocolate."

# OUT-BALES THEM ALL!

## NEW McCORMICK No. 46

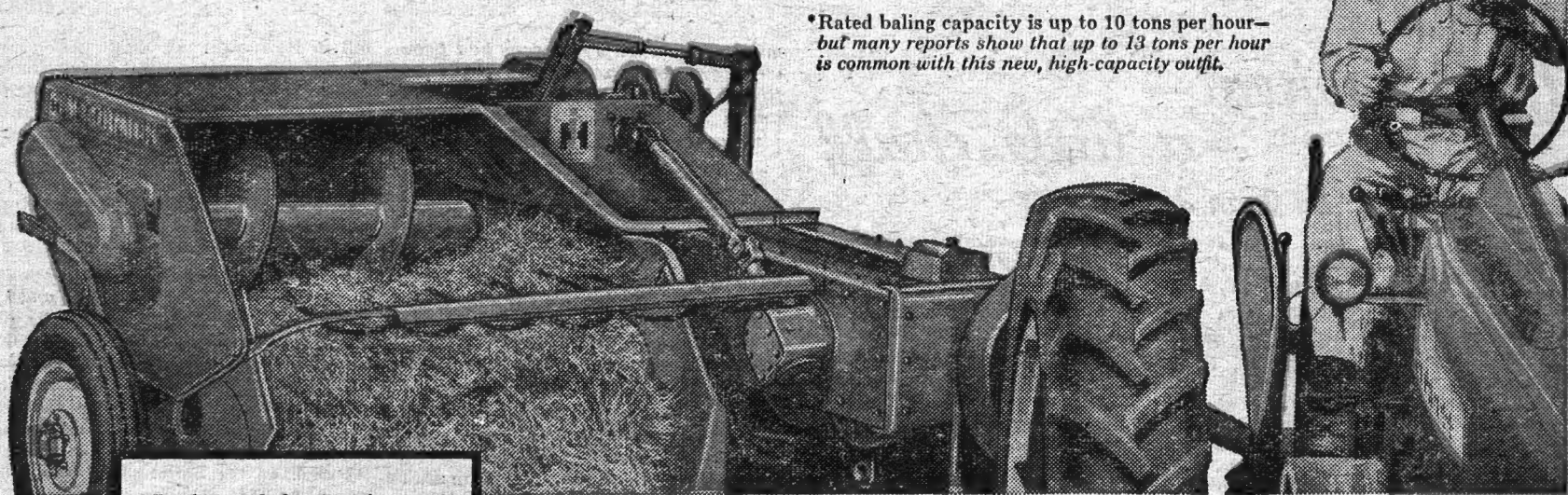
### HAY HOG OF 1958



THIS YEAR there will be two classes of farmers—those who *have* No. 46 Balers—and those who *wish they had*. The terrific hay-handling capacity\* of this all-new McCormick is the envy of the industry. Baling costs are almost halved, time-wise, by the hay-hogging McCormick No. 46. The only baler built that's better than a McCormick No. 45.

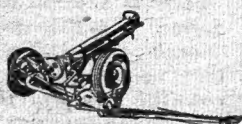
Come and see the difference that *makes* the difference. See the new, wide-open design from windrow to bale that tells its own story. Let your IH dealer show you point-by-point, feature-by-feature, fact-by-fact why nothing can do it like a McCormick No. 46—then **YOU BE THE JUDGE.**

\*Rated baling capacity is up to 10 tons per hour—but many reports show that up to 13 tons per hour is common with this new, high-capacity outfit.



Engineered for continuous, rapid hay handling in heaviest crop. No bottlenecks, nothing in the path of the hay. *Three* wide-sweep packer fingers (instead of two) keep hay constantly on the move through new, extra-wide bale opening. *She just bales and bales!*

Extensive regular equipment includes pto or engine drive, Exact-O-Matic bale length control and automatic bale counter. A long list of low-cost options includes the famous McCormick Bale Density Regulator.



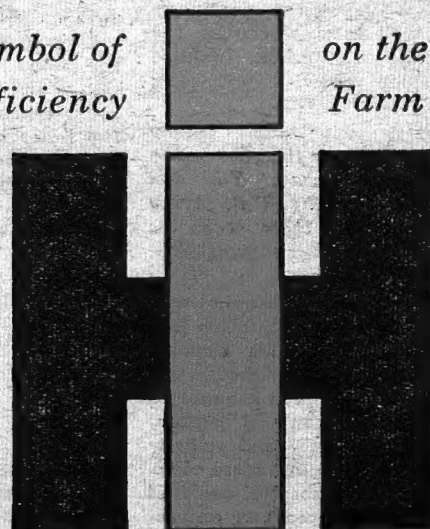
**NEW McCORMICK No. 32 TRAILING MOWER.** Quickly hitched to any tractor. Optional mechanical lift flips cutterbar over obstructions in swift up-over-and-down sequence. The McCormick line includes a mower to fit your tractor and your farm.



**NEW McCORMICK No. 13 PARALLEL BAR RAKE.** For gentle, high-speed raking, clean across the field. Shortest possible hay travel. Rake all your hay when it's ready, at maximum speed, with minimum leaf loss. There are 4 models of McCormick rakes—1 to fit your farm.

Symbol of  
Efficiency

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Farm



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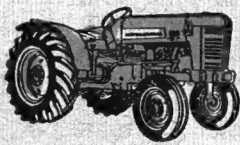
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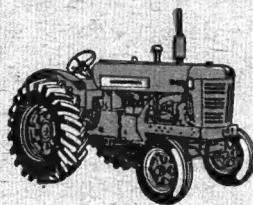
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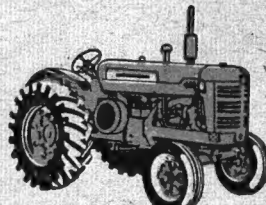
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INTERNATIONAL 650

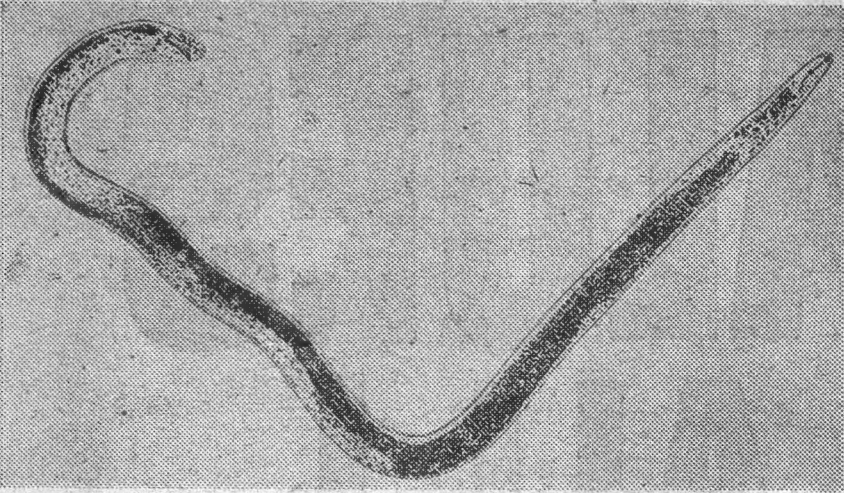
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Canada Agri. photo.

This may look like an Australian boomerang but it is a male root-knot nematode magnified 200 times.

## The Nematode —master chiseller

**T**HE nematode is a thing. So far as scientists were concerned, until the last few years, it was neither animal, vegetable nor mineral. It is a microscopic character and is probably a worm.

It is as insensitive as a bill collector. It has no intelligence, and it has no eyes, but it has been leading tillers of the soil down the garden path for centuries.

The nematode is probably the first exponent of painless extraction. She (because the nematode is bi-sexual, or female) has been slickly picking the grower's pocket all through the ages and he didn't even know it. Hidden tax is merely government imitation of the nematode's method of withering income.

Experts believe the nematode to be muscling in on from 10 to 15% of the total production of the earth.

The nematode is everywhere. It is a citizen of the world. It dwells in the sea, in the lake, and in the rivers; in the soil, in plants, and, as a parasite, on lower animals and humans.

A leading nematologist has stated that, "If all the matter in the universe EXCEPT THE NEMATODES were swept away our world would still be dimly recognizable." And of the numbers in the soil, he said: "The nematodes from an infested 10-acre field if arranged single file would stretch around the world."

The nematode is as unhurried and remorseless as time itself. It spreads, like nasty gossip, slow at first and then like a forest fire. In a decade one nematode, starting in new territory, can increase itself to three to four billion to the cubic foot of soil. This nematode is roughly about the size of a grain of salt.

And this queen of the pests is harder to kill than a mother-in-law's animosity. Potato nematodes will live in the cyst for over twenty years. The rye nematode has been able to go into action after lying dormant for thirty-eight years. The nematode is a new one to most people, but if your carrots or sugar beets have excessive whiskers; if your grain is sickly

and stunted, for no apparent reason, your trouble could be nematodes.

Not only is the nematode a racketeer, he is a top-notch hobo. It has no means of locomotion except to wiggle. And it has a very small wiggle which would only move it three or four inches in its lifetime. So the nematode bums rides from man; via the farmer's boots, on farm implements, on seeds, in potted plants, by truck, wagon or ox-cart. For longer trips, through the same agents it travels the world by car, by train, by boat and, nowadays, by plane. It sails the rivers and the irrigation ditches. It even comes and goes with the wind.

Man has had a nodding acquaintance with the nematode since 1743, so you might wonder how it has got away with its high-handed larceny. Partly because the root nematode, with which we are most interested, is just about indiscernible. The effect of destruction by the nematode in a crop is probably the first indication a farmer has that it is there. And unless he is exceptionally well informed the evidence will mean nothing anyway.

In the beginning of modern research, when biologist's began to specialize, the entomologist ignored the nematode because it was not a bug, an insect, nor properly a worm. The bacteriologist ignored it, too, for it was certainly no bacteria.

Whether it is one, or not, the nematode is now generally referred to as a worm. But while all nematodes may be worms, all worms are by no means nematodes.

Earthworms, tapeworms, flukes and leeches are not nematodes; but eelworms, roundworms, hookworms, pinworms, threadworms, and the so-called "pork-worms" which cause trichinosis are nematodes. While most nematodes are microscopic subjects there are types in Africa growing more than three feet in length.

Anyway the neglected nematode has plodded down the middle of the sciences, "unsung and unheralded", collecting his toll, like a power-drunk racketeer, from everything it could get its stylet into.

The nematode's stylet is a dagger-shaped sword sheathed in its mouth. It is finer and sharper by comparison than anything made by man and can pierce the skin of a rootlet. In the scale of the nematode's world this is equivalent to man having a jack-knife that would rip open a heavy steel vault door.

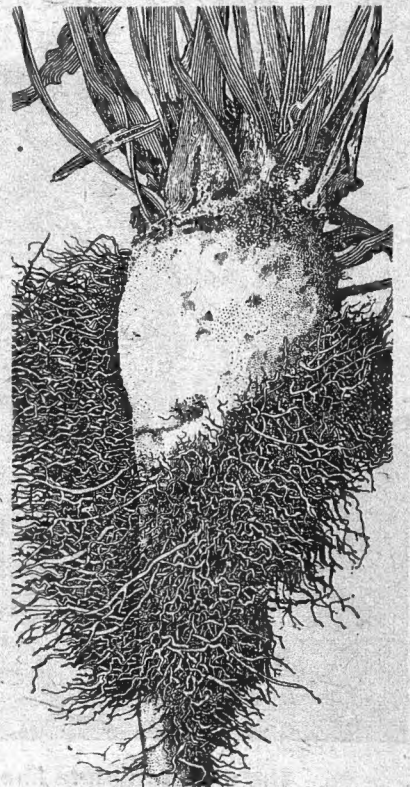
Most plant nematodes start life as a cyst, which is their home and castle until they are ready to make their way in the world. When she ventures out she pierces the rootlet's skin and bores into the root. That's about all the nematode has to do in life to make a living. Once in the root it feasts so greedily

that its rear end pops out of the plant. This backside continues to grow and a jelly-like mass is exuded and built up. Eggs are laid in the mass; anywhere up to 1,000. When mamma dies her skin becomes hard and tough. The late unlamented Mrs. Nematode is now a cyst and a shelter for her future offspring who will eventually make their way in the world, by making their way into a rootlet. Then each will make hundreds more little nematodes.

The reason for the bearded vegetables, the knotted and gnarled roots, is a losing counter-attack staged by the plant. Finding its rootlets attacked it sends out more. But to the nematodes this is like taking candy from a baby. They send out swarms of new nematodes. The plant desperately puts forth more roots. The end result will be a vegetable that is nothing but a rooted whiskery mess; dull-leaved plants, stunted growth, and perhaps as little as a 10% crop for the grower.

Unfortunately the grower will likely put this down to loss of fertility of his soil, or to any of the other many possible reasons for crop disaster.

Considered a relatively harmless plant parasite, the nematode was not taken very seri-

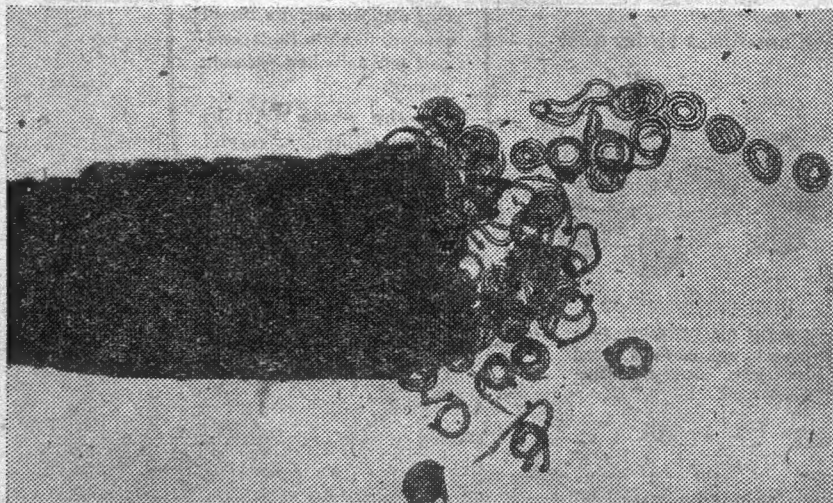


Canada Agri. photo.

Here's what the king of the pests can do to a sugar-beet. In many parts of the world the nematode has put the sugar-beet grower out of business. The whiskers are extra rootlets put forth by the beet in a vain effort of Self-defence.

ously until the turn of this century. It is now exposed for what it is — the chief of the pests with a world-wide organization, and the only pest which attacks almost all crops and plants in any and every climate.

This insignificant worm gets credit, in some quarters, for vanquishing the Mayan (of Mexico) civilization and the Khmer (Indochina) civilization.



Canada Agri. photo.

This is a microscopic view of a bentgrass seedgall, showing that the gall is packed with nematodes, which become active when placed in water.

In the southern States it is responsible for putting whole cultivated areas back to brush and wasteland. It is drastically cutting the yield on millions of cotton acres. In many parts of the world it has put the sugar-beet farmer out of business. It has ruined tobacco land. In Oregon it has ravaged almost the entire commercial bulb industry. And it has just about beat the market-gardener in many spots all over the world. California's annual nematode destruction is set at about \$250,000,000.

The golden potato nematode is no doubt the most wicked of all. It can destroy an entire potato crop. In Europe this nematode has caused such havoc in the best potato lands that most nations regulate potato planting on infested lands; one planting in from six to eight years. In Sweden, Denmark and Holland it is forbidden to ever again plant potatoes on land infested with the golden nematode.

America was free of this one until it was found on some hundred acres on Long Island in 1941. In five years it had spread to more than 1650 acres on 40 farms. By 1954 it was in nearly 13,000 acres on 270 farms. This spread took place in spite of one of the most widespread, expensive wars ever conducted against a pest.

About all that has been accomplished so far in the fight against this serious threat to man's food is a sort of "containing" success. Nowhere does the nematode seem to have been wiped out.

Fumigation, an expensive operation, seems to be about the only thing that fixes the worm for good. But nematologists are quick to point out that fumigation does not solve the basic trouble. Much more research, they say, is needed.

Other methods of getting at the nematode are being carried on. Crop rotation works to some extent. But a farmer needs advice from qualified agriculture men in its practice. With some crops, and some nematodes, the rotated crop tastes just as good to the nematode. Then, again, it is not very satisfactory to substitute, say a valuable sugar-beet crop, for some crop a tenth of its value.

Fungi which feast on nematodes are being encouraged. Cannibal nematodes who have a taste for their cousins are being studied. Certain mites have a sweet-tooth for nematodes. Crops have been discovered which serve as trap-crops; these are plants for which nematodes have a special yen, but on which the nematode has no effect; it doesn't grow and it doesn't lay eggs.

In some cases crops can be forced ahead of schedule and thus smartly nematode, running on schedule, done out of his cut.

Many valuable acres which

have been abandoned for reasons thought to be "soil exhaustion", "soil sickness", "spreading decline" and other vague reasons are now known to have been infested with nematodes. Soil fumigation has proven this, because after fumigation many such soils have had a higher productivity than they were known to have before.

Much, and yet very little, has been learned about nematodes.

Canada is fortunate, to date, in not having been as hard hit as most places. Western Canada, in this respect, is even more fortunate than the east. There are nematodes in some root-crops, sugar beets particularly, in Ontario. Oats, barley and some wheat have nematode problems.

It will certainly be to all of our advantages to keep this piratical pest out, or where it is in, under control. Education among growers is needed. Where expert advice was not available a few years ago, it is now. Any farmer experiencing unexplainable crop trouble should seek such advice without delay.

As always in such matters the problem is to impress the public and the governments that there is a problem, and to conduct the battle for money, suitable equipment, and trained personnel.

On the continent of North America there are thousands of plant pathologists and entomologists. It is doubtful if there are more than thirty-five nematologists.

This is a pretty small army to be tackling a foe as prolific, as patient, and as destructive as the nematode; a foe which if not fought to a standstill could well run us right out of the country.

But to where? As one nematologist has put it, "the day has long passed when we can abandon ravaged lands and move to new ones as the ancient civilizations did." — I. H.

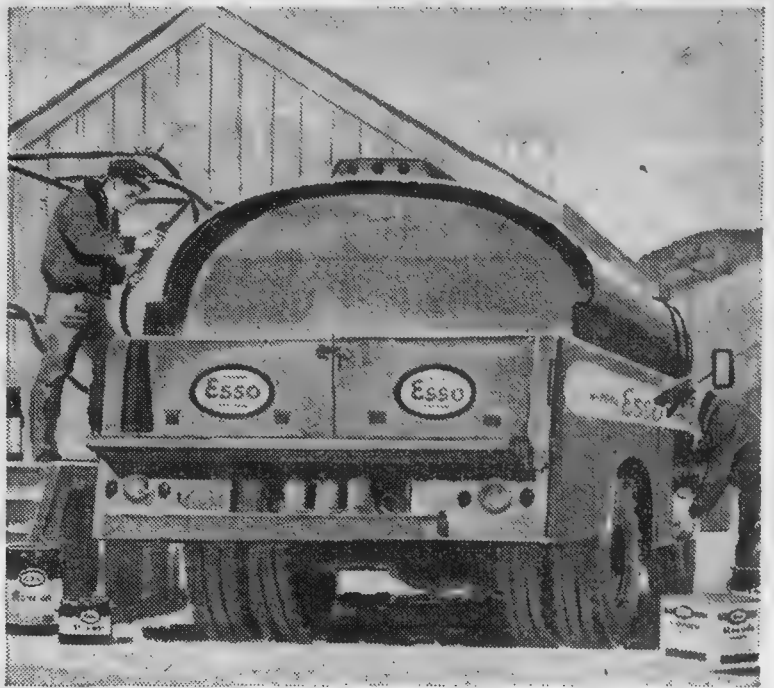
### Mud for hog diet

POSSIBLY someone should be barrelling the water, or rather the muds, of Lake Victoria, in Eastern Equatorial Africa, and distributing them to the hog markets of the world.

Lake Victoria is the world's third largest lake (over 26,000 square miles). It is very deep and contains organic matter accumulated over thousands of years. It is rich in sulphates, nitrogen and other plant nutrients.

Some months ago a farmer started feeding his pigs some of the mud. They did so well that he increased the amount until it was one-fifth of their ration, and expensive feeds made up only 8 per cent of the hogs' total feed. Of the pigs slaughtered so far all but one have graded A; the one grading B.

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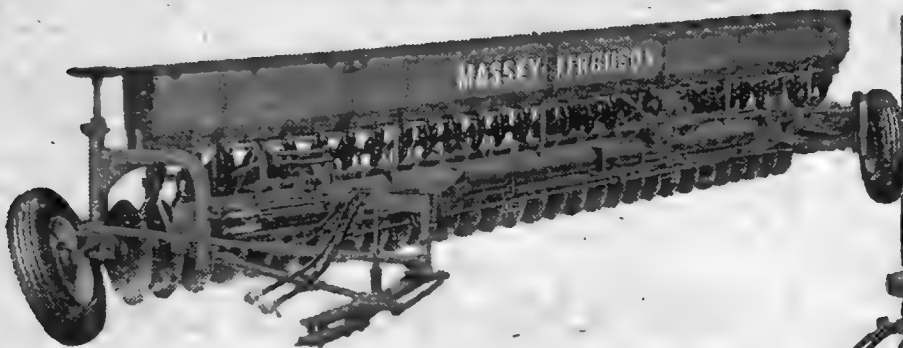
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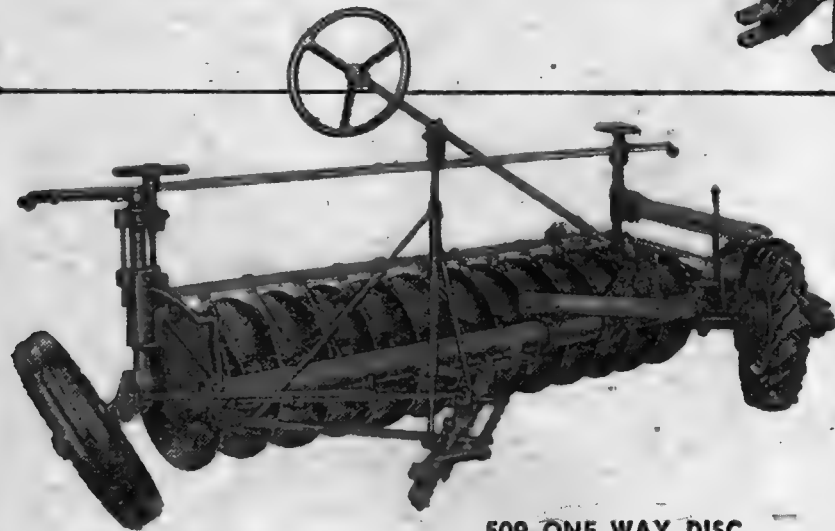


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Here's your answer for all-season cultivation! Disc and seed once over. Use it on your summer-fallow ... for fall tillage. Co-ordinated wheel control for easy turns ... adjustable hitch for correct line of draft ... full floating gangs ... sealed-bearing equipped ... instant angle of cut and land wheel adjustment ... 3 sizes: 18, 24, 30 discs.

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**Dealer Today!**

I CAME across a clipping from a newspaper. It read, "Alexo village to be cleared. After operating for forty-three years the coal mine was forced to close for lack of orders. The buildings were either dismantled or moved away and now a contract let to Mr. Lloyd Wells to clear the townsite."

Alexo — the name puzzled me. Where did it come from? What historical fact would posterity lose from its discard?

The Geographic Board of Canada states that Alexo after operating as a hamlet for several years was given village status in 1923. It was named after Alex Kelso the discoverer of the coal mine there, and a pioneer Alberta coal operator.

There are many other Western Canadian place names that honor pioneers.

Provencher in Manitoba was named after Bishop Provencher whose diocese stretched from the Great Lakes to the Rockies. Lacombe, an Alberta town, honors a Roman Catholic missionary who came out west in 1852 and spent the greater part of his life there ministering unto the Indians and the half-breeds.

Railway magnates (he was president of the C.P.R. for one hour), industrial barons, statesmen and even crowned heads knew the venerable priest and paid him tribute. When he died at the age of ninety, all Canada noted his passing with regret. He was buried at St. Albert where half a century before he had worked with hammer, saw and axe to build the little log church that is so deservedly preserved today.

Other places that preserve the names of doughty Catholic missionaries are Tache, Vegreville, Leduc, Legal and Grouard.

The Reverend Mr. Rundle, a Wesleyan, was the first minister to be stationed at Edmonton. That place, however was merely his nominal station, as most of his time was spent amongst the Assiniboine Indians between Edmonton and Banff. He labored amongst them from 1839 to 1847 when his health gave way and forced him to return east. Mt. Rundle in the Rockies is a worthy memorial to that conscientious man.

Right Rev. G. E. Lloyd, who came from England as a chaplain to the Barr colonists gave Lloydminster its name. Mount McDougall is a fitting memori-

# Canadian place names

by Wm. Grasiuk

al to the Rev. George McDougall, a Methodist who labored for years among the Stoney Indians. Nesbitt Lake is named after the Rev. James Nesbitt, who established a Mission at Prince Albert in 1866.

Taber was named out of consideration for the Mormon settlers in the vicinity. It is the first part of the word "tabernacle". Other Mormon names are Cardston, Elcan and Raymond.

Several places are named after an important event: Loyalist, Consort, Veteran, Throne and Coronation, all in Alberta, were named in 1911 when George V was crowned king. Just prior to the two subsequent coronations the postmaster of the town of Coronation received stacks of letters written by souvenir seekers to themselves with the request that they be stamped on the Coronation Days.

Other Canadian places have 'Royal' names: Prince George, Queen Charlotte Islands, Prince Albert, Port Arthur, Regina, Victoria and the provinces Alberta, Prince Edward Island and New Brunswick.

It is interesting to know how the other seven provinces received their names. Newfoundland was named by John Cabot and means just that, new found land. Nova Scotia is Latin for New Scotland, British Columbia brings to mind the discoverer of America. The other four are of Indian origin. Quebec means where the river narrows. In 1603 Champlain found the Indians using it as a crossing. Ontario is 'Beautiful Lake'. The Indians had a superstition about the roaring sound made by the waters of Lake Manitoba in the strait, and called the waters Manitou Bau, "Strait of the Spirit". The name Saskatchewan was first applied to the Saskatchewan river and means swift flowing.

Other Indian names abound. Toronto mean "Trees in the Water"; Niagara thundering waters, Erie is cat. It was given by the Iroquois to the people living near the lake and originally meant "People of the Panther." Namao is sturgeon, Meenook, good camping ground, Chipewyan Pointed Skins, Tawatinaw river between the hills, Etzikom, valley; Ponoka, elk; Amisk, beaver; Kinuso, fish and Sunwapta, turbulent.

Kamloops in British Columbia is of Indian origin. It is at the junction of the North and South branches of the Thompson Rivers and means "The meeting of the Waters."

According to legend there was a squaw with an evil tongue. Her malignant gossip

spared no one. The Red Skins appealed to the Great Spirit for protection. Their prayers were answered. Manitou seized the culprit, dragged her into the lake and swung her round and round. Her tongue was so black that the clear waters became murky. A name was given to the lake, Murky Waters — Winnipeg.

Wetaskiwin first saw light in 1892. It means "Hills of Peace." It was here one fine spring evening that the Cree and the Blackfoot Chiefs met one another unexpectedly on the top of a high hill and wrestled. While resting after the struggle the Cree pulled out his pipe and began to puff on it contentedly. The Blackfoot found to his chagrin that he had broken his in the tussle. The Cree chief was a generous foe and passed his pipe to his enemy. He took it with alacrity and began to smoke. Immediately it dawned on the two braves that they had smoked the pipe of peace and had to abide by tradition that there was to be peace. The two foes descended the hill and told their painted braves what the Great Spirit had willed. The two tribes returned home without any scalps, but the future Alberta city received a very pretty name.

One Sunday morning a survey gang slept rather late. One member of the party woke up earlier and went for a stroll. He returned with a handful of red and blue berries. "What are they?" the cook inquired.

"The Indians call them saskatoons" was the reply.

"Are they edible?"

"Not only edible but very delicious, the Red Man uses them to flavor his pemican." And that is the origin of Saskatoon, a city in Saskatchewan.

Our cosmopolitan population has given Alberta many cosmopolitan names. Grande Prairie is French and means big prairie. It is the largest prairie area in northern Alberta. Beauvallon is "beautiful vale"; the village commands a beautiful view of the river valley. Del Bonita is Spanish for "of the pretty." Granum is of Latin origin and means "grain". Chornohora is Ukrainian for "Black Hill". The spruce trees give the hill and area a sombre appearance. Bruderheim was named by the German settlers and means Brethren's Home.

Many names are descriptive of places and events. Yellowhead and Kicking Horse Passes were both named at the time of the building of the Canadian Pacific Railway. The former was named after a French lab-

orer with a luxuriant growth of reddish hair; the latter after a casualty; a horse kicking a man in the stomach.

A caravan of ox-carts crossing the prairies found itself tool-less when a cart needed repairs. But necessity is the mother of invention, a jaw of the moose was used, and Moose Jaw is the result.

Cut Knife Hill was named after Cut Knife, a Blackfoot of exceptional valor, who left his bones there after a lone fight with four or five Crees.

Hairy Hill in Alberta has a point of interest in the way it got its name. The early settlers called it by that name because they found it covered with long, brown buffalo hair every spring when for some reason the buffalo in the immediate vicinity went there when their thick winter coat of hair was shedding and rubbed it off against the trees, so that the ground was covered with it.

Portage La Prairie in Manitoba got its name from the old fur-trading portage between the Assiniboine River and Lake Manitoba a few miles to the north.

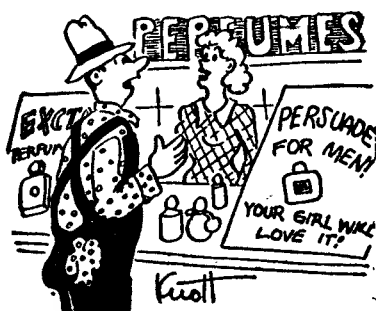
The author Butler tells the story of Buffalo Lake in Central Alberta. "Far out on the Prairie there lies a lake whose waters never rest; day and night a ceaseless murmur breaks the silence of the spot."

"See," says the Red man, "It is from under that lake that our buffalo comes. We cannot kill them all — they are there under the water. Do you hear the noise which never ceases? It is the buffalo fighting with each other far under the ground, and striving to get out on the prairie!"

And Calgary, the home of the Farm and Ranch Review! It was named by Col. James Macleod of the Royal North West Mounted Police in 1876. The expression is Gaelic and means "Clear Running Water." It was the name of the ancestral estate of his cousins on the island of Mull near Scotland.

## River of milk

IF all the milk produced in North America this year was poured into one stream, it would make a river as wide as the ordinary highway, more than six feet deep and stretch from New York past Los Angeles.



"Do you happen to have something to keep cows from stepping on my feet?"

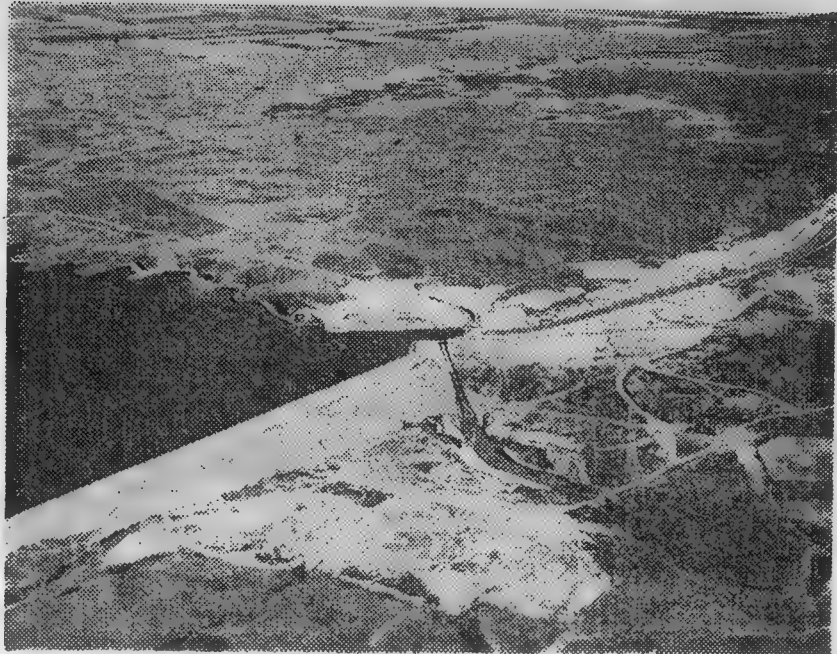


"WELL, I SEE YOU AND YOUR ANNOYING LADY FRIEND ARE AT WORK."



P.F.R.A. Photo.

It was to get away from dangerous sidehill terrain such as this which forced the building of the Travers dam, shown elsewhere on these pages. The canal, bridged by a sidehill flume, can be seen under the immense cut of the hill.



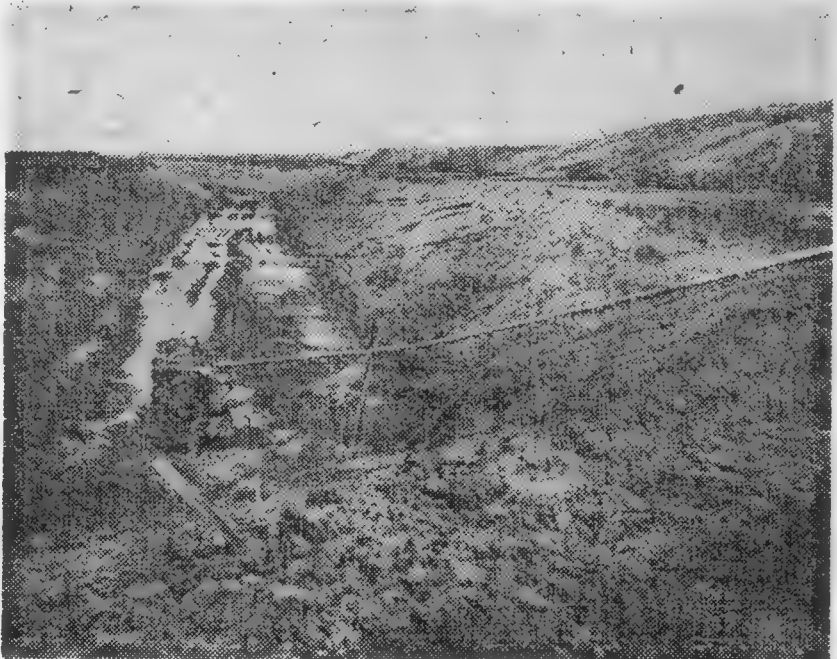
P.F.R.A. Photo.

Travers dam, west of Vauxhall, Alberta, forced into being by the flume on the dangerous sidehill shown in another picture.



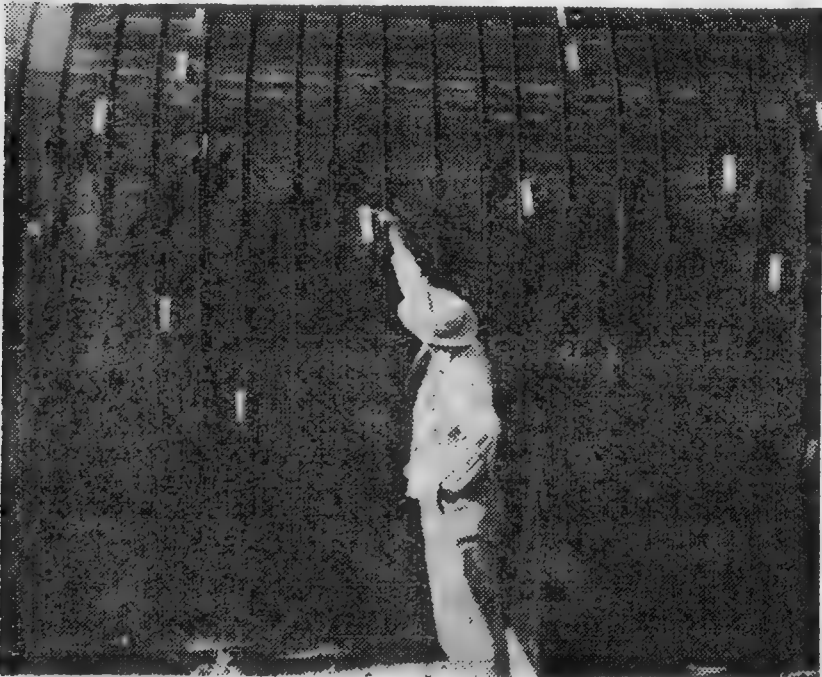
P.F.R.A. Photo.

Water flowing through a canal which winds its way through farm lands. A lot of dirt was moved before this became a reality. At the bottom of the picture can be seen the construction of a "drop" relocation.



P.F.R.A. Photo.

No bed of roses mucking around in this kind of a job, although the biggest part of the work is done. Here rainwater is being pumped from a future canal so the work can proceed.



P.F.R.A. Photo.

A close-up of the type of siphon used on Alberta irrigation projects to carry water over deep coulees, or river valleys. These siphons are built of 4" by 8" timbers and are fourteen feet in diameter.

## Money, work and time required for irrigation

THE clink of much gold must be heard in many places before the trickles of mountain glaciers find themselves flowing lazily along an irrigation canal far out on the parched prairies.

The South Saskatchewan River project, in the conversational stage once more, will, if built, be at an estimated cost of around \$250,000,000.00. Since this estimate was made a few years ago the cost will likely be more.

All the words of the famous phrase, 'blood, sweat and tears' will apply to the job, too, for it is a colossal task to string any major work across the endless miles of western plains, with

their heat and cold, their dust and wind, and their rain and frost. When it comes to keeping water on the move the term 'flat prairies' becomes just a figure of speech. In the construction of irrigation systems the prairies are far from flat.

Dams and reservoirs, siphons, canals, intakes and outlets are required in numbers and all at tremendous cost before water is ever put on a farm.

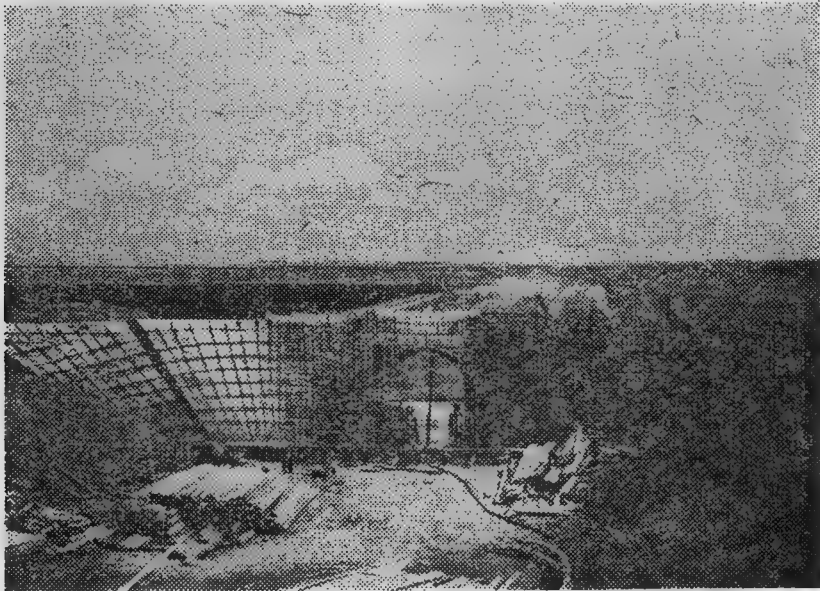
Many of these links are engineering headaches. Low spots must be circumscribed or traversed, rivers with deep valleys must be crossed and countless coulees avoided or bridged. Besides a multitude of lesser problems must be overcome.

An idea of the work involved may be gathered from the Royal Commission's findings after studying the project. It figured ten years would be required to install the dam and start an irrigation system, which would then be upwards of fifty years in being completed.

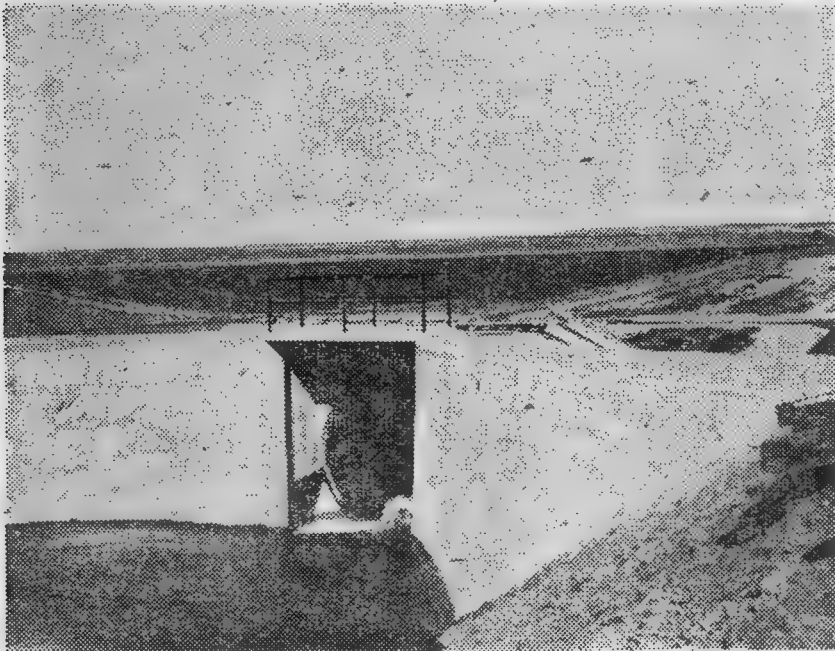
Some sense of the magnitude of the job, and the cost in transforming dry lands into lush irrigation districts may be gath-

ered from the pictures on these pages; pictures depicting various stages of construction on prairie irrigation projects now in operation.

When one drives into such prosperous Alberta districts as Lethbridge, Taber, Vauxhall, Brooks and others, all former dry land areas and now high in specialized crops and their fast-growing related industries, the costs and the toil may be considered well worth while.



Preliminary construction of the intake to one of the giant syphons, this one leading into Expanse Coulee, Alberta.



The completed intake at Expanse Coulee, with a small flow of water running into the syphon.

### Beef cattle shelters

IT has long been recognized that beef cattle shelters serve only two major purposes. These, says Alberta's Live Stock Supervisor, are to protect animals from rain or wet snow and to break the direct blast of cold winds. They are not required to provide a place where air is warmed above the temperature of outside air. These factors have largely been responsible for the disappearance of conventional barns for beef cattle and the appearance of a wide variety of sheds open on one side, most of which are providing the necessary protection.

Beef cattle shelters can be very cheap or quite comprehen-

sive in construction and still do the same job. Where capital is a limiting factor, it may well be that a cheap straw shed may have to serve on a temporary basis until finances are available to put up a more permanent structure.

The following area is recommended on a per head basis for sheds and yards:

	Shed
Bulls in groups	25-50 sq. feet
Breeding cows	40-50 sq. feet
Feeder and replacement calves	20-30 sq. feet
Feeder and replacement yearlings and two-year-olds	25-50 sq. feet
	Open Yard
Bulls in groups	200 sq. ft. and up
Breeding cows	50-100 sq. ft.
Feeder and replacement calves	50-100 sq. ft.
Feeder and replacement yearlings and two-yr.-olds	50-100 sq. ft.



P.F.R.A. Photo.

The East Arrowwood (double) syphon as it crosses the valley, with a good view of the inlet structure on the far side. These syphons cost around a million dollars to the mile (singly).

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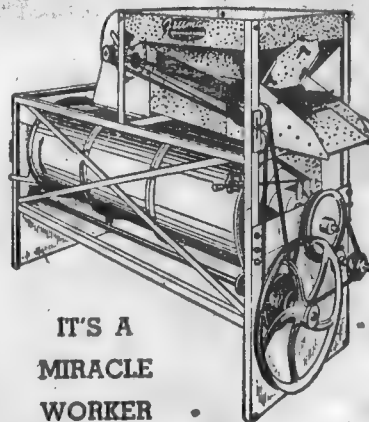
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In earlier times the true Prairie Dog lived on the vast prairies in their millions. Twice the size of the common gopher, the Prairie Dog usually had the entrance to his burrow the very top of a cone of earth.

## I went to the dogs

by Grant MacEwan

AUTUMN seems to belong to the hunters — as farmers finding their gates left open more often than usual have discovered.

I, too, went hunting, but the experts who travel with station-wagon and all the high-powered and high-priced accessories would probably scorn my expedition. I went with neither license, gun nor desire to kill, and returned with a "full bag" — some pictures, a couple of arrowheads, an ancient coin, a book full of notes about historic sites, trumpeter swans and prairie dogs, and a lot of memories.

The main purpose of the trip was to visit "dog town," south east of Val Marie, where the only remaining colonies of the "dogs" are to be found in Can-

ada. But the lures of the Cypress Hills lay along the route — those hills which John Palliser, a century ago, called "a perfect oasis in the desert we have travelled," a paradise for the lover of nature and a treasure trove for the student of Western Canadian history. Nobody should travel through the Cypress Hills in a hurry. I stopped to profit and enjoy.

At rebuilt Fort Walsh, deep in the Hills — since 1943, a horse-breeding station for the Mounted Police — history has left its imprint with particular clearness. It is easy to catch a vision of that frontier metropolis of 80 years ago. For some time after its construction in 1875 — same year that Fort Calgary was built — it bore about

the same relationship to the surrounding area as Fort Macleod did farther west and Fort Garry in the Valley of the Red River.

After seeing the equine produce of recent years — a dozen good two-year-old colts soon to be broken to mounted police saddles, 11 yearlings with impressive uniformity and 16 foals of 1957, mostly by the imported Faux Pas — I found myself being drawn by those immutable links with the history of the Hills. I wanted to stand in the depressions which were cellars in the years when a village of hunters, traders and freighters stood immediately north of the fort. One of those cellars belonged to the store of the I. G. Baker Company and was thus a part of the biggest single merchandising and freighting organization in pioneer years. I wanted to stand in the log building, exactly where the police officers held conferences

with Sioux Chief Sitting Bull, hoping to persuade the warrior to take his uneasy followers back to the United States. Close by, in almost perfect condition, was the 9-pounder cannon taken from Fort Dufferin in Manitoba to the site of Fort Macleod by six-horse team when the police made their initial trek in 1874, and, finally, I found myself walking in the grassed-over ruts cut long ago by ox-drawn Red River carts and bull-team wagons carrying the freight to and from Fort Walsh.

Four important trails radiated from there like highways from a modern city metropolis — a trail south to Fort Benton in Montana, one north to Battleford, one leading south and east to Wood Mountain, and the fourth that crossed Battle Creek near the post and made its crooked way westward to Fort Macleod. Some of those old lifelines are still easy to follow.

And four miles south on Battle Creek is the place where traders from Fort Benton turned their guns on Assiniboine Indians occupying about 40 lodges. That most shameful slaughter may have done much to hasten the formation of the Mounted Police. Anyway, for six years after it was built, Fort Walsh, now peacefully producing black saddle horses, was one of the six best known centres in all of the North West. Little wonder that hills and trees, like the weathered markers in the little cemetery, have stories to tell.

History, oozing out here and there through the Hills, seems to be trying to compete for the student's attention with scenery, vegetation and wild life. Once the Cypress Hills were a rendezvous for grizzly bears and buffalo. They still offer variety. White tail deer were enjoying the sanctuary of the Provincial Community Pasture, from points in which, one can command a view of Maple Creek to the North and Bear Paw Mountains a hundred miles to the south. And under the guidance of Commissioner S. T. Wood (retired) of the Royal Canadian Mounted Police, we had the thrill of looking down upon a Cypress Hills lake and watching a family of trumpeter swans — members of a race which, a few years ago, was thought to be in an alarming state of decline, like the whooping crane. Annually for at least seven years, the big and handsome parent birds have returned to that lake for nesting. Last year, according to Commissioner Wood's observation, the adult swans produced a single young one and until this year, the increase had not exceeded two. But 1957 was a prolific year and as we gazed and admired, it was very easy to see the two adults and six young swans.

With so much to see in the Hills, it wasn't easy to leave, but we had promised ourselves the visit at "dog town". It was a five-hour drive, down the south slope whose run-off water flows

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toward the Gulf of Mexico, through Consul where there was a cattle sale in progress, through Climax where the highway sign claims a "population of 5,000, including dogs and cats," through countryside where crops showed the effects of summer drought, and to Masefield where we had the very good fortune to meet Val Wingerter who cheerfully offered to accompany us to "dog town." There being so many branching trails, he concluded it would be easier to go along than to draw a map for our convenience. Moreover, it was too damp for combining and the task of killing rats under his barn by means of exhaust fumes from his tractor could easily wait for another day.

And so, about ten miles, four farm gates and some stretches of antelope and rattlesnake country east of Masefield, we stopped the car.

"Do you hear them?" the farmer who had become our guide enquired. Sure enough, before we could see them and before we emerged from the

car, we could hear the squeaky barks which explain how these attractive little animals came by their name.

The mounds, extending over a quarter section or more, were immediately visible. But the "dogs" were not conspicuous. As we were to discover, they are wary fellows and were not inviting inspection at close range. Fortunately, we had field glasses and with them it was easy to observe their movements and study their characteristics.

These natives of the prairie country which many western people have never seen, are members of the squirrel family, twice as big as ordinary gophers and endowed with more charm. As we saw them, they were standing erect to get a better view, or squatting at entrances to holes. An approach to within 50 or 60 yards caused them to flick their pretty tails and disappear into their long tunnels.

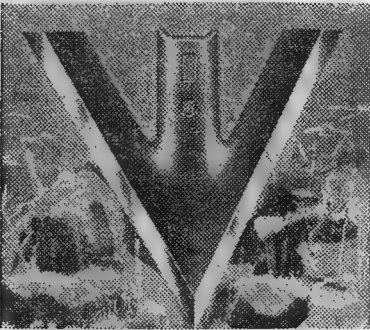
No doubt the subterranean regions beneath our feet were a veritable network of passages and caverns. The entrance is unique, being exactly in the centre of the mound with tunnel leading almost straight down for several feet before branching. Most mounds show good care. As we saw them, many had been freshly raked or scratched over as if the occupants were anxious to have the front yards looking spic and span for visitors.

I came away wishing I knew more about the habits and social organization of these community-minded little animals.

There are several "dog towns" along the Frenchman River, but in no other part of Canada are they to be found. Once they were numerous — numbered in millions — but gradually, they have retreated before the advances of cultivation and civilization. Thus, their survival must be in doubt. Our guide recalled that when he came to that section of Saskatchewan in 1925, he was close to four "dog towns", one of them on his land. As soon as he began to break the sod and pick stones, the prairie dogs left quickly and completely. Of the four colonies he knew 32 years ago, just one exists today. The dogs have a strong liking for their own company for which they can't be blamed, but they can not stand more than a little of the human kind.

It would be a shame if those likable little creatures with saucy faces and a strong desire to mind their own business were to lose out in the struggle to survive. They would even settle for land with the lowest productivity, just as long as the plows and tractors are kept away. In the interest of wild life conservation, would it not be fitting to set aside an area of that low-priced land — dedicate it in perpetuity to those fascinating creatures that look like overgrown squirrels, and hope they would survive and enjoy themselves?

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## Agricultural Trade Situation

World food production in 1957-58 is expected to increase over the previous year. A near record bread-grain production is forecast estimated at 367 million short tons, just slightly below the record 1956-57 crop of 271 million tons.

World production and trade in dairy products, which in 1957 is expected to reach the highest level recorded during the post-war years, is likely to increase further in 1958.

Supplies on world meat markets are expected to rise in 1958 with a substantial increase in hog production. Beef production is also likely to increase in various exporting countries.

Demand for agricultural products in industrialized countries is likely to remain high, particularly for meat, dairy products, eggs and fruit in North America and Western European countries.

Consumption of bread-grains and vegetables will continue to expand to meet the needs of rapidly growing population in various under-developed countries.

Canada's share of the market for bread-grains and other cereals in deficiency areas will depend upon demand and will be materially affected by United States sales programs undertaken for these cereals.

On the other hand, the marketing outlook for the exports of livestock and other Canadian agricultural products should be relatively favourable in 1958.

## Economic Outlook for Canada

Economic activity in 1958 will depend to a considerable extent on the level of capital investment. Despite reduced activity in some industries in 1957, total personal income continued to increase and allowed Canadians to increase their volume of consumption. It is probable that consumer demand will continue as a sustaining force in the economy during 1958.

Cash income from the sale of farm products may be slightly higher in 1958 than in 1957. The main factor for grains will be the volume of exports and the consequent availability of elevator space for the delivery of stocks presently stored on farms.

Cash income from the sale of livestock and livestock products in 1958 will probably be higher than in 1957. Most increases are expected from the sales of cattle, dairy products and poultry products and can be attributed in the main to larger marketings compared with 1957. Prices for these commodities in 1958 will probably be maintained at levels prevailing in 1957. Income from the sale of hogs may be down slightly, since lower prices may offset the effects of higher marketings.

# What's ahead in 1958

The following is a brief summary of the agricultural outlook for Canada prepared by Economics Division, Department of Agriculture, Ottawa.

## Farm Labour

The large increase in the labour force during the early part of 1957 and the weaknesses that have developed in certain industries indicate that the general supply of farm labour will continue to be higher than last year, at least during the spring and early summer of 1958.

## Grains and Feeds

World production of wheat for the 1957-58 crop year, estimated at 7.6 billion bushels, is somewhat below last year's record of 7.8 billion bushels.

Stocks available for export and carryover held by the four major wheat exporting countries (Canada, United States, Australia and Argentina) at September, 1957, totalled 2,232.9 million bushels, about 11 per cent below last year.

World exports of wheat and flour in 1957-58 are expected to fall below last year's record of 1,283 million bushels, but may exceed the 1951-52 previous record of 1,066 million. Expected increased production over last year in many importing countries will cause a substantial reduction in the quantity of their imports. Factors which may help Canada to obtain a larger share of the total market next year are a wide selection of grades available for export, including supplies of top quality high protein wheat; a lessening of United States barter activity; the possibility of broader markets in countries of the Soviet Block and prospects for smaller crops in Australia and Argentina.

Total supplies of Canadian feed grains in 1957-58 are estimated at

22.2 million tons, about five per cent below those of last year.

Supplies of Canadian feed grains, both carryover and production, are reasonably well distributed this year, with overall eastern supplies larger and western supplies smaller. Exports of oats, mainly to the United States, may be about the same as last year, with those of malting and pearl barley about equal, and feed grades less. Domestic disappearance may be larger this year, reflecting the increased number of grain-consuming animals and the continued trend toward finish feeding of market cattle.

Overall fodder supplies are much below those of last year, with marked variation in supplies between regions. Crops are larger than last year only in Ontario and British Columbia. Hay supplies are much below average in the Maritimes and shortages may develop in some areas. In the Prairies the margin of reserve is small. Pastures were good in Eastern Canada, but early snow storms and cold weather shortened the season over much of the Prairies.

Little change from last year is expected in supplies of mill-feed, and oil meal supplies, including imports, are likely to be adequate. As increases are expected to both hog and cattle slaughterings, quantities of packing-house products in 1958 should exceed those of the previous year.

## Livestock

Output of livestock from Canadian farms in 1958 is expected to be greater than in 1957 by about 8 per cent and may break the all-time record set in 1944.

If this increase materializes, supplies of livestock and meat will probably outstrip the growth in domestic demand. Production in the United States is expected to show no increase while the demand for meat in the United States is likely to increase at least as fast as population. Increased imports of livestock and meat into the United States are not likely to satisfy this deficit and the general price level of these commodities in the United States is expected to rise above 1957 levels.

Cattle production in Canada is expected to set a new record but an increase in export demand, owing to a downswing in U.S. production, is expected to result in an increase in cattle prices. Hog prices, however, are expected to be well below those of 1957 in response to an increase of about 10 per cent in marketings. Production of calves, sheep and lambs, and wool will likely show little change.

## Dairy Products

Milk production in 1958 is expected to total 17.5 billion pounds, slightly more than in 1957. Since the dairy herd in 1958 may be about the same size as in 1957, this production will be achieved through a slightly higher level of output per cow, reflecting better and more intensive feeding practices.

A general continuance of recent trends in consumption of dairy products is likely in 1958. During the year, domestic disappearance of all dairy products may total the equivalent of 18 billion pounds of milk. This is likely to result in prices paid to producers in 1958 being at approximately the level in effect in the latter part of 1957, and average returns for the whole year being higher than in 1957.

It is likely that there will be increases in the utilization of milk for fluid use, ice cream and butter. Cheese production is expected to decline by one-quarter and the output of the major concentrated milk products by lesser amounts.

## Eggs and Poultry

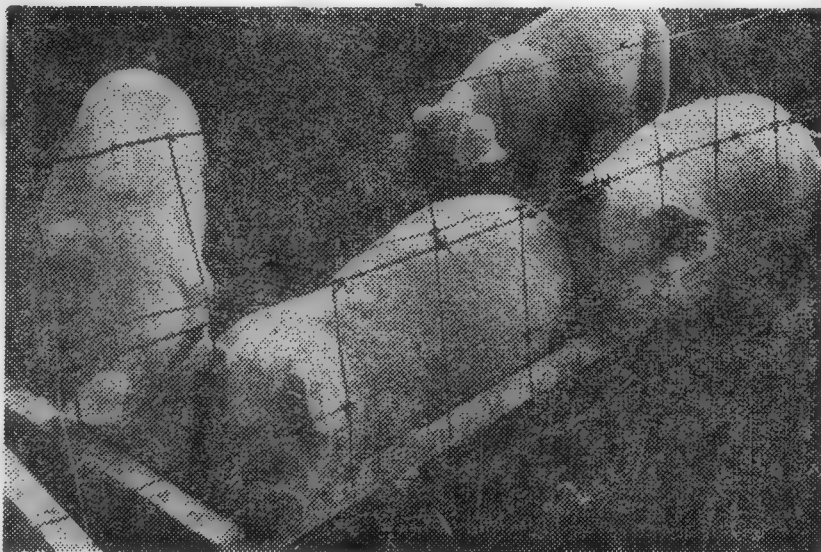
Egg production in 1958 is not expected to differ greatly from the 1957 level and egg prices are not likely to average any higher than in 1957.

One factor which might reduce the volume of surplus eggs carried in storage and might even improve egg prices is the possibility of moderate to substantial exports of eggs to the United States in late 1957 or early 1958.

It is expected that marketings of all kinds of poultry meat in 1958 will exceed the 1957 level.

## Fruits and Vegetables

The 1957 apple crop of 13.5 million bushels was 9 per cent above the 1956 crop. Exports from this crop is expected to exceed two million bushels.



Farm and Ranch Photo.

HEY, MOVE OVER!!! —We like our guests to make themselves to home, but, after all, there's a limit. This trough's for feeding, not for sleeping... and take your friend with you.

An upward trend in the production of other tree fruits is suggested by the recent orchard census. Production of strawberries and raspberries is expected to increase in 1958.

Potato imports are expected to be lower than in 1956-57 because prices in the United States have exceeded those in Canada. Little change in exports is likely. The processing industry is growing rapidly in importance as an outlet for potatoes and the production of potato chips and frozen French fries is expected to increase further in 1958.

During 1957 the development of new production areas for fresh vegetables continued, and a further development of these areas is expected. During 1958 the growth of the frozen fruit and vegetable industry is expected to continue.

### Seeds

Although production of a number of forage seeds in 1957 was sufficient to provide surplus quantities for export, the market for such seeds is very quiet. This is in contrast to the active market and good prices that existed in the fall of 1956.

United States production of most forage seeds, particularly the grasses, is considerably larger than normal and has had a depressing effect on prices in Canada. Furthermore, larger production of forage seeds in Europe has decreased the need to import Canadian seed to meet domestic requirements in that area. The situation, therefore, with respect to forage seeds indicates larger world supplies with resulting lower prices. From the standpoint of the seed growers in Canada, market prospects at attractive prices are not good.

On the other hand, Canadian farmers should be able to purchase their seed requirements in 1958 at prices well under those prevailing in 1957. As it is not expected that production of alfalfa seed in Canada will be sufficient to meet domestic requirements, it will be necessary to import supplies to supplement Canadian production. Reports indicate that supplies of adapted varieties are adequate in the United States to meet the expected Canadian demand.

The market in the United States is quite strong for registered and certified wheat and oats and it is expected that sur-

plus quantities of rust-resistant varieties such as Selkirk wheat and Garry and Rodney oats will move readily. While there should be adequate overall supplies of registered and certified cereals and other large-seeded field seeds to meet domestic needs in 1958, there may be local shortages of some varieties in Western Canada due to frost damage and inability to complete harvest because of snow and other unfavorable weather conditions.

### Special Crops Outlook

The outlook for the marketing of the 1957 flaxseed crop is good. As in most recent years the export market will be the dominant factor in determining flaxseed prices throughout the marketing year, and at present it appears that the export market will be buoyant at least until the spring of 1958.

With a record crop of soybean being harvested this year in the United States, it is expected

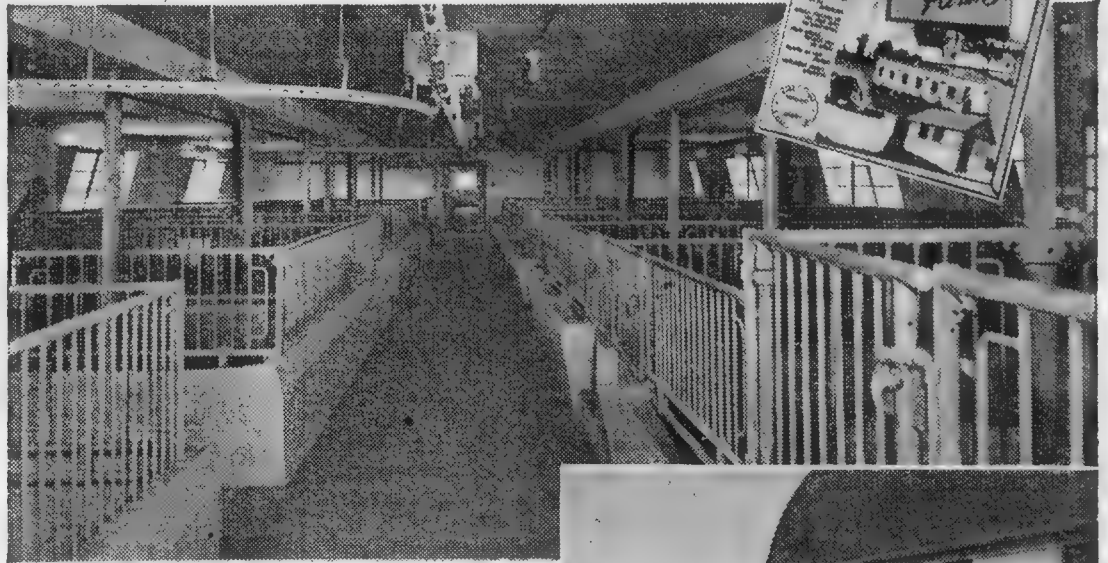
that soybean prices there will remain fairly close to support price levels throughout the 1957-58 marketing season. Assuming that U.S. prices continue to set the pattern for soybean prices in Canada, Canadian prices will likely average fairly close to 1956-57 levels.

It is expected that most of 1957 rapeseed crop will be exported, largely in seed form, with Italy and other countries of Western Europe as the main market.

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B-8

# The premature Duke . . .

by Lela Andrews

THE Duke came to us one chill January morning when the mercury had taken an unpredicted dip into the twenty below range on the thermometer. We weren't expecting our milk cow to freshen, not for another month, so the Duke's arrival was a complete surprise. And being a twin and a month premature, we really didn't count on his survival.

He was born in the cowbarn gutter, an unfitting place for royalty, perhaps, and his twin sister was an identical replica of him. They were both shiny and black with clean white foreheads that spoke immediately of their Hereford father. In a moment of whimsy, I named them the Duke and Duchess of Twinsor.

Unfortunately, the Duchess was unable to cope with the cold world into which she'd been delivered and she died almost as soon as we found her. But the Duke clung stubbornly to life.

In a case like this, I suppose every stockman questions the wisdom of keeping such an animal. Sometimes, they're more fuss, bother and expense than they're worth. Sometimes, they die later, anyway, and your troubles have been all in vain. But with the Duke there was never any question. We rubbed him off with straw, loaded him into a washtub and transported him to the warmest corner in the kitchen.

Thus began the Duke's struggle for existence. Actually, it was a struggle that the whole family took part in because we were all rooting for him and working over him.

First, we rubbed him dry with rags and wrapped him up in the folds of an old, discarded blanket. And then, because he was thoroughly chilled and still shivering, we administered a healthy dose of warm brandy. After that came his mother's milk, warmed on the stove and offered in a ketchup bottle with a baby nipple on the end. Duke wasn't slow in discovering its contents. He closed his eyes and sucked contentedly.

We built Duke a pen in the basement out of old packing cases and we made it comfortable with a bale of hay. Duke was carried down to his new home.

Although he still couldn't stand, he seemed to like his domain and he was always ready when the ketchup bottle appeared. He emptied it many times at each feeding. There were bleats and impatient baaings while the refilling operation took place. There were bleats and blaas, too, whenever he was

lonely, for the Duke enjoyed having people around him.

Two weeks passed with Duke still in his basement pen and with our house beginning to assume a suspiciously barnyard aroma. But we now could see that the calf was progressing. He had strengthened both in body and legs and his hooves had become near normal. He could stand, now, a little wobbly to be sure, but standing all the same, and it wasn't long before he was attempting to buck and kick and caper in his pen.

Such progress proved itself a problem, for the pen was small and too confining and Duke wasn't long in overcoming this difficulty. An extra large caper, he discovered, took him over the top. After that, he was out of the pen more than he was in it and it wasn't unusual to be met at the basement door by a soft-eyed, inquisitive little head and an extended bleat of welcome.

So the Duke was moved to the barn.

He was given the feed alleyway as a makeshift, private home of his own and there he reigned supreme and domineering. We attempted to dispense with the ketchup bottle and teach him to drink from a pail, but our lessons failed to impress him. Without the bottle, Duke wouldn't drink at all. Finally, we bought a special pail for him—a calf-saver bucket with a rubber teat near the bottom at one side. The flow of milk is controlled by a small valve as the calf sucks. This arrangement pleased Duke and he took to it immediately.

So it was that by spring, the Duke was a fine, frisky, sleek-haired little calf, a trifle small for his age, but fat and healthy all the same. He went to pasture with the range cows and calves and returned that fall, a veritable stranger.

He had grown, like cattle on good grassland always grow, and he had begun to develop an impressive set of horns. He lost them, of course, in the fall dehorning roundup.

No longer was he the soft-eyed, blating pet that we had fussed over with a ketchup bottle. He was still tame, still half of a mind to follow when he heard his name called, but now he was a member of the range herd. And that was where he stayed.

This fall, the Duke will go to market, a big, raw-boned, rangy steer. And when the cheque comes back and the Duke is gone, I'll wager we'll consider his life span well worth striving over. Sometimes, a little extra effort pays off with stock.

## FARM FACTS BY Chipman



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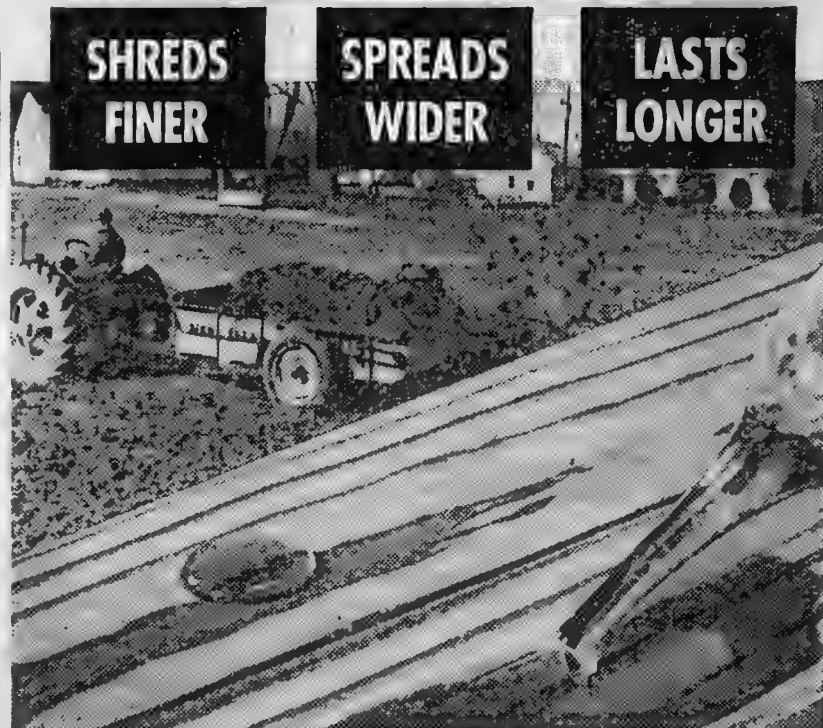
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## New **MF65** plows rings around ordinary tractors

This aerial photograph shows an actual and down-to-earth test in progress. Starting at identical times, these two tractors—one an ordinary 4-plow tractor, the other the new 3-4 plow MF 65 with the Ferguson System—lugged plows through heavy going. The amazing MF 65, with a *four* bottom plow, not only kept pace with its far heavier rival pulling only *three* bottoms, it soon outworked it!

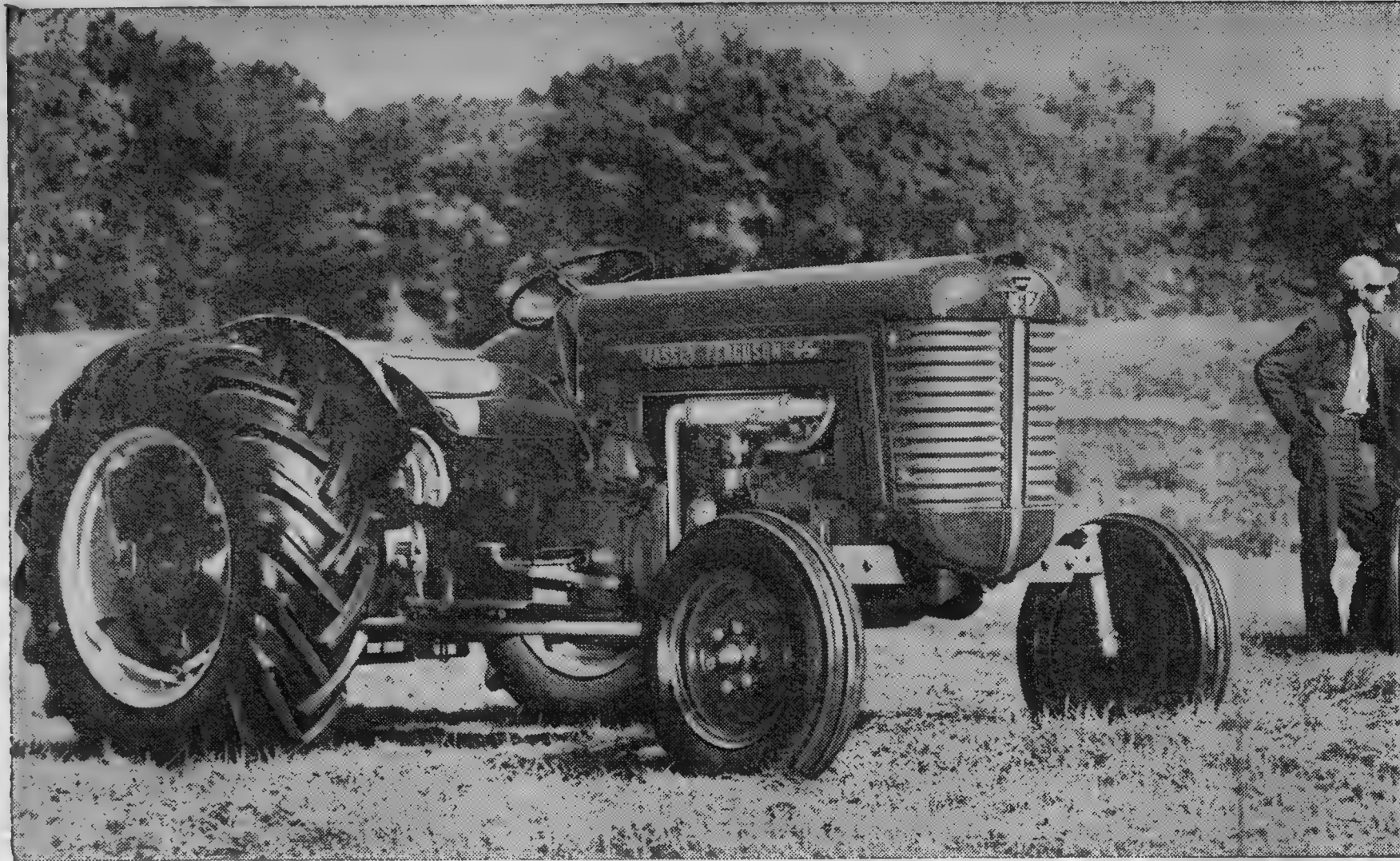
Held up by underground obstruction, the new MF 65—without releasing its plow—cleared and continued working in a matter of seconds! This remarkable test goes a long way to prove the claims made (over page) for this tractor—the first of the bigger tractors with the world-famous Ferguson System in the new Massey-Ferguson line of farm machines and implements.



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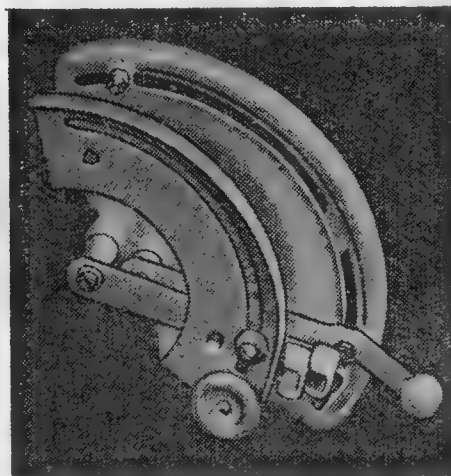


## New MASSEY-FERGUSON 65 designed

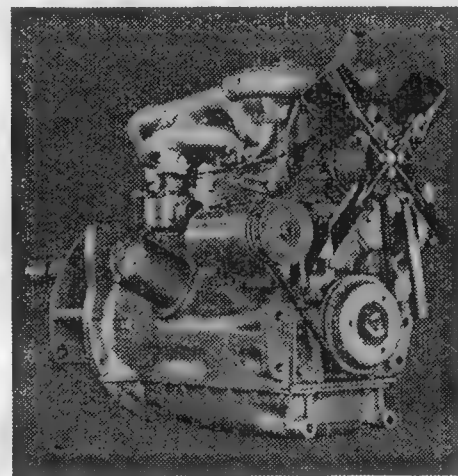
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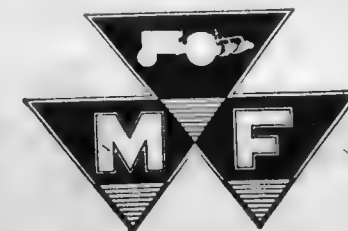
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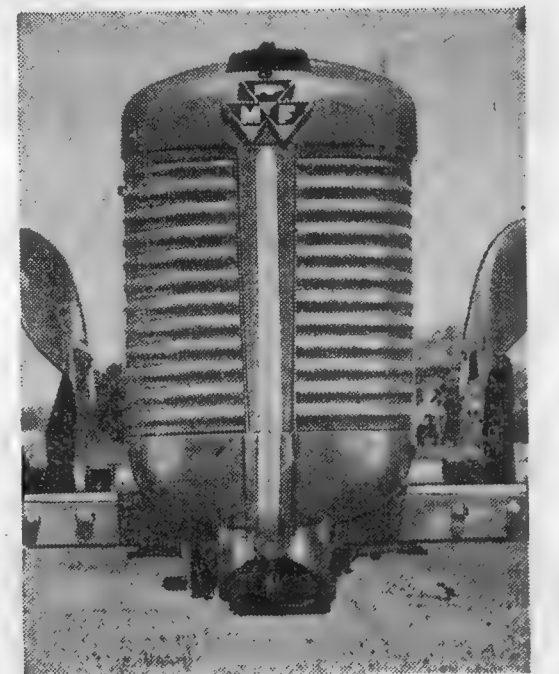
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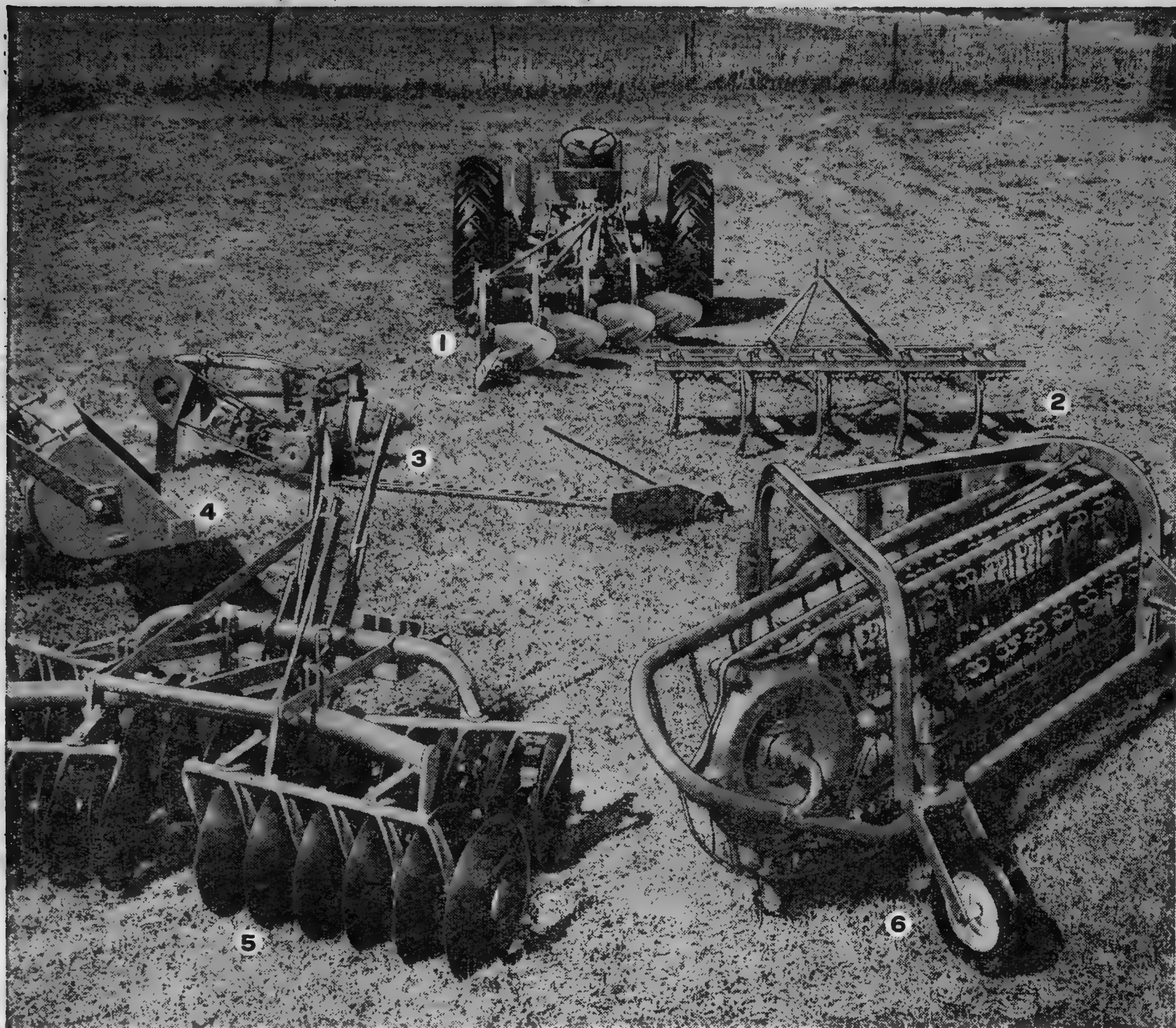
No more tugging and straining to link up your implements no matter how uneven the ground, no matter how heavy the tool! It's child's play with the new 'wrist action' lower links; without any time wasted trying to back-up the tractor into exact position. To hitch up, the wrist action is unlatched; then, when the implement's attached, the system relatches! It's that easy to get going on the job with the new MF 65.



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## Life in the Old West

# Indian uprising in Northern Alberta

by Annie L. Gaetz

(As told to the writer by the late James Youmans)

IN the spring of 1880, Rev. John McDougall went East and returned to Alberta with thirty recruits for missionary work among the Indians. My wife and I were among the number. We left Ontario in June, and, guided by the Missionary, we travelled by rail, boat and Red River carts until we reached Macleod in southern Alberta. From there we were assigned to our various missions and mission schools.

Mrs. Youmans and myself were assigned to Whitefish Lake, 60 miles north of Victoria (now Pakan, Alta.), where a mission had been established in 1855 by Rev. H. B. Steinhauer. In 1864 Rev. Geo. McDougall had set up a mission school there, and it was here I was assigned as teacher, preacher (and to some extent doctor) replacing the aged Steinhauer. As the mission house was still occupied by the old missionary, we were obliged to make our home in a deserted Indian shack for a few years until a house could be built.

Shortly after we arrived at our mission field, unrest among the Indian and Metis population became apparent. After the suppression of the first Riel Rebellion, the Metis (French-Cree) population along the Red River became fearful of the influx of white people, and came out to "The Land of the buffalo" (north central Alberta) where they hoped to be undisturbed for one generation. They laid out for themselves long narrow farms each with one-eighth of a mile river or lake frontage, and extending back two miles.

Shortly after we arrived at our mission, government surveyors started laying out the land into sections and quarter-sections. Fearing they would lose the homes they had built, the Metis sent a delegation to Ottawa under Gabbriel Dumont.

They were politely received and assured that their farms would be surveyed as they requested; but when they returned home, they found that these

promises were not being fulfilled. The Toronto Globe at that time, aptly set forth the situation in the form of a cartoon, picturing an Indian Chief with the head of Sir John A. MacDonald, watching a pot boil over a camp fire. Underneath was the caption, "Old Chief Tomorrow goes to sleep and lets the pot boil over."

After ambushing a squad of policemen, killing nineteen and wounding seven, the Metis sent word to the Indians far and wide, telling them that they had won a great battle. That they found they had greater fighting strength than the police, and that they had killed a great many, had secured their horses, guns, etc., and if the Indians would all rise together they would wipe out the Whites.

Moccasin news travelled quickly. Peter Erasmus, government interpreter at Whitefish Lake (now Atikameg, Alta.) was helping me put up a new log school house when Chief Seenum rode up and told us of the rebellion. Louis Way-chukun, a delegate from Big Bear's rebel band had arrived and was to meet the Whitefish Indians in council the next night to try to persuade them to go to war. "I know that I shall not go," said the Chief, "and I hope that none of my men will go; but if the rebels hear that a white man and his wife are here they will send men to kill you and take your wife away. We would fight for you, of course, and men would be killed on both sides. If you are not here, there will be no fighting, for after all they are our brothers, even if they are fighting against us." The Chief advised us to hide in the woods until peace was restored, which we decided to do.

All that day, we prepared, and as soon as the lights of the village were out, Robert and Edgerton Steinhauer took our carts and cached them in the woods.

The war council was later described to us as long and stormy. Louis Way-chukun, with painted limbs and chest,

told how easily they had captured George Mann and his family, Indian agent at Onion Lake reserve, of the white men they had murdered at Frog Lake, hay the Co-ke-mu-sis (H. B. Factor at Fort Pitt) had opened the doors and allowed them to take all his goods. Louis told them that if they would join Big Bear's camp, they would have a share of all booty.

Chief Seenum, who was a Christian Indian, told them that such ill-gotten gains would soon be wasted, and he assured them that the white man's friendship was worth more to them than his goods, and that it was wrong to go to war against their white brothers.

Peter Erasmus also made a great peace speech, telling of the dream of his foster son Peter Shirt, which foretold disaster to Big Bear and his followers.

Chief Seenum went to the opposite side of the room from where the rebel delegate was sitting, and he said, "All who think like me, that it is better for us not to join Big Bear's camp, come on this side." All except Big Snake and his brother joined Chief Seenum on the side of peace.

Very early the next morning we were on our way north from Whitefish Lake to hide in the woods. As we left the village we had quite an escort, Chief Seenum, his son Ely and other friends rode with us for a time to make sure we got safely away. That evening we sighted the tent of Charles Jackson, our neighbor, and Colpman, a trader, who were on their way to Whitefish Lake, not knowing of the rebellion. They decided to join us, and, early the next morning, we moved off the trail into a poplar bluff.

After remaining in hiding for two weeks, we became impatient to know how things were going in the village. We had become very tired of a diet of salt pork, and what rabbits we were able to snare. We dare not shoot for fear of attracting attention. We decided to sneak out to the village for news and for potatoes and other provisions we had left in the cellar.

We moved down to about three miles of the village. Then, while Mrs. Youmans remained hidden in a bluff, Colpman, Jackson and I went in for supplies and news. We went stealthily along until near the village, then Jackson crept up and looked over the hill by the church. He reported to us that he saw Arthur Steinhauer planning boards for a coffin, and he

thought he had been seen. Arthur came over the hill and told us to hurry back to our hiding place, and he would bring us provisions on the morrow, which he did.

After another week of hiding in the woods, friends sent two Indian guides to bring us out to Victoria. Three days over the trackless prairie brought us to our destination.

When we arrived at Victoria, we found empty houses, the people having taken to the woods. A few days after our arrival they returned and started seeding operations, part of the men working while the others stood on guard with guns. We anxiously awaited the arrival of troops from Edmonton.

We were, indeed, glad when the troops arrived with guns and ammunition. I was made quarter master of the Fort where a good stock of food and ammunition was stored. I issued rations once a day except on Sunday, the ration for that day being issued on Saturday. All the white men and breeds were sworn in as scouts and guides. We remained at the Fort for forty-two days, during which time nothing startling happened. Shortly after the troops arrived at Victoria, William Stamp, recently named Kot-su, man-slayer, came in from the woods and gave himself up to General Strange, having shot Louis Cardinal for trying to loot the Hudson's Bay Store at Whitefish Lake. General Strange told him to rise and accept a plug of T & B tobacco as a token that he had done well in slaying one of the Queen's enemies. Later the Blue Book recorded, "To William Stamp for killing Louis Cardinal, four head of cattle."

After the rebellion we returned to our Mission at Whitefish Lake, where we found things unmolested. Shortly after we got back, the Police arrived and called the Indians together, telling them that they had warrants for the arrest of Big Snake and his brother.

"Oh, they are off in the woods hunting," replied Chief Seenum. "Very well," said the Sergeant, "you send some of your men to bring them back."

The Police went north to arrest other rebels, leaving a Police to take charge of the rebels when they came in, which they did long before the return of the Police from the north. The rebels were then loaded into a wagon with the others to be taken to Edmonton. As they drove away Big Snake called back to me, "Teacher, look after my son." They were given a good scare and then released. This ended the rebellion in the northern part of Alberta.

Chief Seenum's name was changed by his people to Pakan, meaning nut, hard to crack, because he would not be influenced by Big Bear. Because of his loyalty, the name Victoria was changed to Pakan in his honor.

WHEN our town's nature sanctuary was first established, custodians had trouble with young Dan'l Boones who carried axes and blazed fat trunks to mark their way in and out of the tree-grown reserve. A deep blaze-cut seriously injures a tree, hence the custodians had to curb the juvenile hatchet-men. A few signs were put up, notifying all concerned that trees were officially protected in the nature haven.

Shortly after, I went there for

## Stories in the snow

by Kerry Wood

a walk one December Saturday after a fresh fall of snow. Only one human track preceded mine along the main path; from the foot size I judged the track-maker to be approximately twelve years old. An axe head was imprinted alongside his trail, so I followed him to learn if the new signs had any effect

on the boy. When he came to the first of those signs, the lad rested his axe-head on the snowy ground and leaned on the handle while reading the message. He shuffled his feet, perhaps re-reading the notice that sanctuary trees were now protected by law. The boy walked a dozen paces into the woodlands, hesitated, returned to look at the sign once more, then suddenly rushed to the nearest small Christmas tree and axed it off with a furious onslaught of inept blows. He didn't take time to trim, but grabbed the butt and went racing to the nearest fence boundary. There he tossed the tree over, crawled through the wires, picked up his prize and long-legged it across the adjacent field towards town. Obviously a guilt complex bothered that lad, and the whole psychological problem was clearly exposed by the tracks he left as a snowy record for all to read.

Winter provides us with excellent opportunity to get better acquainted with all those who traverse the snow, especially the wild creatures who are forced to reveal their habits and haunts by day or night. Most of us are so used to the trails of rabbits and mice, weasels and coyotes that we hardly bother to look at them. Yet a little study of the white etchings gives us many an insight into the private lives of woodland neighbors.

Have you seen bark-scars high on a willow thicket in summer time and wondered how rabbits could reach up there? Winter snows may carry the hairy pad marks of a porcupine leading to such a willow, thus changing the identity of the bark-eater. Have you doubted the worth of weasels? Just follow their twin prints and notice how many mouse dens the lithe killers visit during a night's wandering. Do you have the secretive mink on your farm? A walk after a fresh snowfall may provide convincing proof. Along fence rows next to the grainfields, there are always dainty marks where buntings, redpolls, and longspurs have dined on weedheads to prove their tremendous worth as farm allies.

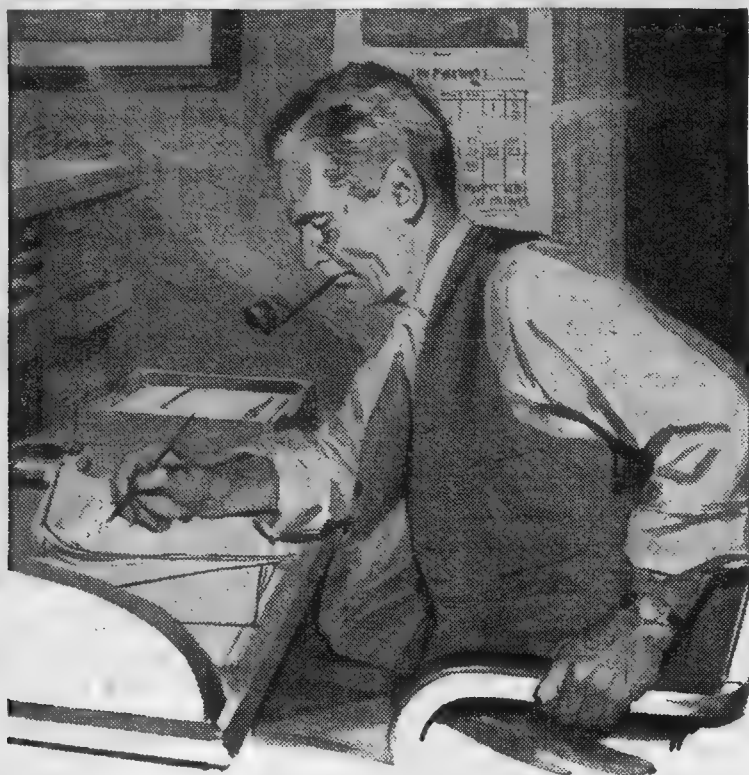
Sometimes a rabbit hops too close to a snowy overhang next a creek and crashes down amid a cloud of dislodged white stuff, then we can see where it righted itself, shook itself, and went slowly away at a careful gait as though resolved to have no more such accidents. A skiff of powdery snow on slick ice of slough or river often relates a comic yarn. Sometimes a coyote was merely trotting by and lost its footing in a slithery sprawl. On another occasion it might have been chasing a bun-

ny when the slippery stretch was encountered, and over went the tawny wolf in a somersault while the rabbit made good its escape. Frequently an excited squirrel ventures too far out on a snow-covered branch to scold some imagined enemy, when suddenly the snow falls off to let the branch spring upward and toss the squirrel off its safe perch. One came a cropper at my feet last winter by such a happening, so I saw the whole track-story in the actual making as the frantic squirrel scrambled back to the tree and raced up, where it impudently scolded me louder than before.

Tracks enlist the sympathy of the tracker. For instance, last February I followed a fresh mink trail on a twenty-below morning. I saw where the animal had sniffed at this hole and explored that overhang, and ventured hopefully along a well-packed rabbit run. I found myself hoping that its food-quest would be rewarded, and soon. Eventually the tracks showed where the mink had pounced on a red-backed mouse under a leaning deadfall, and I rejoiced.

Yesterday I was out in foothill woodlands where there were tracks of lynx and marten, deer and moose. A moose had raced across a lumberman's road at reckless speed, probably having heard the roar of an approaching truck. Tracks showed where the animal had stopped in the midst of a jackpine thicket; I could almost picture its big ears flagged back as it stared from the screened hide to watch the passing of its arch-enemy, man. Farther on the trails of three elk converged on the spot where a giant old spruce tree had blown down during an early winter blizzard. In falling, the spruce flattened some smooth-barked poplars. The hungry elk used strong teeth to rip off the nourishing bark, the snow story revealing how much they had enjoyed this chance feast provided by an ill-wind which killed a forest giant.

In that same back country, there was a bird track going short-stepped and chicken-footed under the headfalls, over the hummocks, out of the spruce shadows towards the slope of a hill. The bird had scratched there, working hard to clear a way down through the scanty but crusty snow. Finally it won through to the fleshy leaves of a growth of partridge berry. The ruffed grouse ate the mealily red fruit borne by the hardy wild vine, and afterwards climbed higher up the hill to a bare patch of ground near the crest. There the bird squatted on the sandy clay, scratching once more to provide itself with a dust-bath before hunching still and having a winter's sunning while marking time, like you and me, until spring is due again.



## ARE YOU SURE YOUR FARM IS MAKING MONEY?

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It's too late to do much for these cattle. They are badly infested with warbles that have already lined themselves along their backs. Treatment by a systematic insecticide some time in the fall could have prevented this.

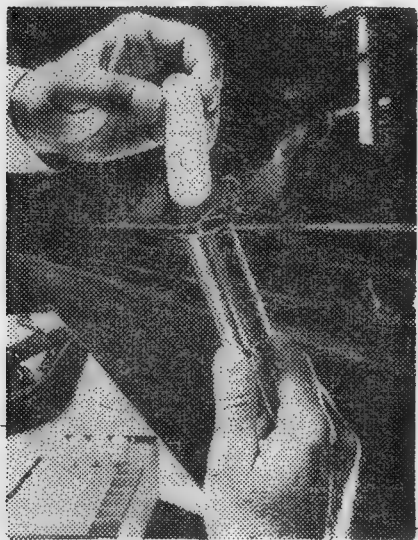


In striking contrast is this pen of smooth-backed cattle that were given a dose of the new drug Trolene well before the lumps appeared. Considered the most expensive pest attacking beef and dairy stock, the warble causes losses of up to \$14,000,000 annually.

## Banishing Warbles


THE pictures on this page would seem to bear out any claims about the value of the new insecticides in the control of warbles. These were taken by the Dow Chemical Company, and show a comparison between animals treated with their drug Trolene and untreated animals.

Once the chemical is introduced by mouth to the animal, it spreads via the blood stream throughout the whole animal system and destroys any developing grubs before they emerge through the hide, alongside the backbone.



One of the advantages of the insecticide is its convenience in handling. It is administered to each animal in the form of a large pill or bolus like the one shown above. The bolus is then popped into the animal by means of a small balling gun.

Developed initially to control warbles, Trolene has shown promise that it may eventually be adapted to successfully control other pests, such as sucking lice on cattle and hogs, chicken lice and mites, sheep nasal bot, and fleas, ticks and lice on dogs.



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## Detour over the P.G. & E. on the Alaska Highway

by Elma Helgason

I WAS ready for bed, when an invitation to go up the Alaska Highway, and over the P. G. & E. came my way.

"Can you be ready by nine in the morning," asked my brother over the phone.

"Sure thing!" I replied, wondering meanwhile just how it was to be done.

We worked out the details that evening, and by eight the next morning we were on our way.

We had dinner in Dawson Creek, but it was after two when we left this foothill city and drove north on the Alaska Highway. For the first few miles the country resembles that along the Hart — open and rolling. Then we entered lightly wooded country, and first thing we knew, we were rolling down the mighty hills of the Kiskatinaw. Here we were surrounded by a wilderness of hills and canyons where I'm sure mountain goats would love to play hide and seek. We went up the other side, to enter level timber country again. Dotted here and there through the wilderness were tiny houses surrounded by trees, with a truck or car sitting in the yard. How, I wondered did these people make a living?

Soon we were going down the rugged hills to the Peace. Always it is a thrilling sight to see this mighty river. "There," said my brother, "On the flat across the river, is Taylor. See the oil refinery?"

I certainly did, for the day had turned sunny and the refinery shone like a silver castle, while the whole town stood out in sharp relief.

"There you can glimpse the broken bridge," he said.

It was a shocking sight to see this broken link in the Alaska Highway chain. This great bridge that the people of the north had waited for so long.

Half a mile from the bridge came the detour that leads to the Pine River. Here we drove through a Christmas-card scene: Tall timber, decorated with frosty snow, and a white road where the snow flew like dust in summer. We soon found ourselves entering the bridge that was so hastily erected over the Pine, after the catastrophe happened.

The Pine is not a little river. While it can't quite steal the Peace's thunder, it was no small bridge that was required to cross it.

The Pine enters the Peace just below where the collapsed bridge stands. Strange to say, in this country of mighty river banks, the entrance to the Pine

bridge from the south side is level. Not so on the other side however. How a road was made up those hills as they are just loose gravel, and one would think the gravel from the hill-sides would slide down and fill the road as fast as it was made. The road was there, however, and it is to be hoped the hills beside it stay put as long as it is in use.

Between the Pine and the Peace, the country is mostly open and level. Presently we found ourselves at the stop sign where the one-way traffic over the P. G. & E. begins. The red light was on and we waited, my brother called our attention to something we would not otherwise have noticed. Behind the buildings that house the officials who regulate the traffic were some old ranch buildings. Things around the yard seemed to indicate that they had been in use a long, long time.

While we waited, traffic coming off the bridge was going past us. It was mostly oil tankers, and more oil tankers. At last the bridge was cleared and the green light came on. We drove down a fairly steep incline, turned a very sharp corner, and there we were on top of the P. Q & E. bridge!

It was a thrilling moment! Never had I even hoped I might cross the railway span while it was being used as highway, but here I was! The first thing that surprised me was that the ties were already laid. It is hoped and expected that the trains will be running next May, so there is not much time to lose in finding another way to cross the Peace.

The bridge is nine feet wide, just wide enough for the big trucks to get by. Along the sides, four-by-four posts have been nailed upright with a rail at the bottom and another higher up. The posts are only a little distance apart, and every third or fourth post has a silver disc on it that outlines the sides clearly at night. As traffic moves at only fifteen miles per hour, there is time to get a view of the Peace as it winds its way between the sleeping hills.

Toward the far end, the bridge makes a sweeping curve. This does not stop the big vehicles, as many seemed to think it would.

It's a long ways down from the top of the bridge to the waters of the Peace. On the north side of the river are flats that the bridge also crosses to link with the hills back from the river. Off the bridge the road curves north, down the north side of the hill, to the river flat below. Here it goes

under the bridge, then up the hill again where it winds its way along to Taylor.

Coming down the hill on the north side I had a good look at the under parts of the bridge. The piers in the water are enormous steel ones, but on land they are timber, crossed and re-crossed to make a safe structure.

On the river flat below, just to the south side of the bridge is a lovely grove of giant spruce. Here a few homes have been built. The occupants certainly have interesting and beautiful surroundings to gaze at. The Peace below, the bridge above, and the surrounding hills and canyons stretching into the distance.

Before long we were on the northern outskirts of Taylor, the oil city that sprang up as if by magic, around the refinery. We did not stop here, but climbed the hills into the farming country surrounding Ft. St. John.

They say that Ft. St. John has doubled in size in the past year. Certainly it is an impressive sight, set on the hillside facing south.

Once past the side roads, we headed for Ft. St. John in earnest. The big modern stores, and the array of neon signs testifies that this is no backwoods city. Outside the town limits is the airport, where planes land before taking off for Prince George and the coast, or for Whitehorse and points north.

As we drove back toward Taylor I was puzzled by the number of fires I saw burning here and there all over the country. "They are oil wells burning off," volunteered my brother. "I counted twenty fires as I came down the highway one night."

Back at the P. G. & E. bridge again, the tankers put on an almost dizzying display for us. In the daytime they are just tankers, but at night, decorated with so many lights, they look like travelling Christmas trees. As we looked down toward the bridge from the hills above there were tankers on it, below it, on the north side and on the south side. It was an arresting sight.

As we drove onto the bridge, the car lights shone on the silver discs, on the posts, clearly outlining the edges. Down below the mighty Peace sang a dreamy song, as it rumbled on through this immense northern land.

Before long we were crossing the Pine in the wake of a tanker. As we climbed the hills on the south side of the Peace, I craned my neck to get a last glimpse of the "Sparkling City" as it shone in starry splendor, on the far bank of the river. Then on to Dawson Creek where we stopped for a bite of lunch before starting the last, long lap for home.

Ed Note: — Since Mrs. Helgason crossed it, the Pine River bridge has collapsed and travel has to detour by Peace River, adding about 200 miles to the trip north.



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# ... Pellets ...

ONE irrigated acre of pasture can replace more than 7 tons of feed in the dairy cattle ration. Tests at the University of Nebraska have shown that the acre replaced 5.58 tons of silage, 1.34 tons of alfalfa and 410 pounds of grain.

THE best livestock herds in the country have been culled — and need constant culling.

A GOOD home-cooked meal is all right for the farmer, but not necessarily for his cows. A report from the American Dairy Science Association states that milk fat production of dairy cows may be cut by as much as 50% by cooking or heating feeds. High levels of bread foods decreased fat percentage from a normal of .3 to 4% to a low of 1 to 2%, and similar results were found in rations of cooked grain and cooked potatoes.

THE tomato is a modern luxury. Just 100 years ago, seed catalogues listed tomatoes as annual, ornamental flowers.

BRITAIN claims to have the greatest number of tractors per farm in the world. On the other side of the ledger, all China has only about 100 tractors — and practically no draft animals. The work is done by humans.

NO wonder the average farmer is wary of the pressures from labour organizers: he has a big personal income to protect. A recent survey in New York State showed that the average investment per dairy farm in that state was more than \$40,000. The average investment for each individual was \$22,500. This is nearly double the capital investment in most industries.

CONSUMERS in Great Britain will know for sure whether the eggs they buy are being marketed under the British Egg Marketing Scheme. All eggs handled by the Board will bear the stamp of the British lion.

NORMALLY, 33% of a duck's weight is fat, but by adding protein to the bird's diet and keeping the calorie intake about the same, the fat can be brought down to about 25%.

A decree of the Belgian government states that Belgian millers must use the entire domestic crop of wheat this year.

THE switch to bulk-handling of milk is on the increase in Eastern Canada. Between 1,700 and 1,800 milk producers in the Toronto area are now using farm tanks. Seven of the 23 dairies for Metropolitan Toronto have already converted to 100% bulk handling of their milk, and several other dairies are planning conversion.

THE two-unit diesel locomotive hauling C.N.R. freight trains uses four gallons of diesel oil for every mile it travels. The locomotive weighs 520,000 pounds and develops 3,500 horsepower.

IN the big fall build up of turkeys prior to the Christmas rush, the United States had about 150,000,000 birds in storage by the first of October. In the single month preceding this date the total in storage had increased by over 48,000,000.

A THREE-VOLUME history of Canadian agriculture is in the making. The Agriculture Institute of Canada is sponsoring the work with \$85,000 allocated to complete the project, exclusive of the actual publication cost.

CANADA'S farm population is still dwindling. In 1941 farmers constituted 27.4 of the population. This percentage dropped to 20.8 in 1951, and it was only 17.1 last year. Since 1951 the farm population dropped by 165,000 and is now 2,746,755.

POULTRY scientists still don't know for sure what causes a blood spot in an egg. Nor do they know exactly what a blood spot is. They have found out that a blood spot and a meat spot are two different things, and further research will eventually produce the answers.

INDIA imported 859,000 long tons of rice last summer, which is the largest volume in seven years. 22% of this was from the United States. Demand is increasing in India and imports of about a million tons of rice a year will probably be needed for the next few years.

THE government of Iran has changed its marketing laws to give its farmers more freedom to play the market. Iranians can now sell their wheat to their government at all times at the guaranteed minimum prices, but they are not compelled to do so. They may also sell to millers or others at the prevailing market prices.

IN case you've ever wondered, same seed comes from (among other places) Venezuela. The current crop is about 18,000 metric tons from about 50,000 acres and represents a 50% increase from last year.

THE foot-and-mouth disease virus has been stripped of its camouflage. Scientists at the U.S. Plum Island disease laboratory claim that they have been successful in isolating and photographing the organism for the first time. This will no doubt speed research and control.

THE cowboys of the West aren't raising all the beef for the dinner tables of this country. The contribution of the dairy industry to the beef trade is often overlooked by both cattlemen and the general public. Some 60% of the veal and 40% of the beef consumed in Canada comes from the dairy herds and is very important to the dairyman's income.

YOU many not find it in the doctors' books, but livestock can easily succumb from what is known as "hardware disease". The animal develops the disease after eating nails, bolts or bits of wire found around the untidy barnyards or even accidentally mixed with feed.

A POOR bull is too expensive to keep as a pet.

THE U.S. wheat give-away has overshadowed the other aspects of their surplus disposal schemes. Yet the U.S. government has given away nearly \$600,000,000 worth of surplus dairy products to under-developed nations within the past two years alone.

WHALE and fish products may be all right for the mink industry, but they don't measure up for a beef cattle ration. The whale solubles which are a high protein by-product of the whaling industry, have not compared favourably with linseed meal as a protein supplement in beef-calf feed.

THE housewife who throws a few table scraps to her chickens and dips into the grain bin for a few cupfuls of grain might be surprised at the size of the operation of the professional poultryman. At the annual convention of the Ontario Approved Hatcheries Association, a Mr. Edward Buck stated that his firm operated one large hatchery on a year-round basis with a capacity of 660,000 birds. The hatchery sold both broiler and egg production chicks and bred many of its own birds.

IT not only takes heat and sunshine to grow prize pumpkins, but it may also take milk. A correspondent of the Pennsylvania Farmer tells of one way to grow the big ones. He says that when the pumpkins are just about matured the roots of the vine should be pulled up and placed in a foot tub of fresh cow's milk right from the barn. The roots should be covered at all times with fresh milk. This is a pumpkin story, but it sounds a little like a fish story.

AGRICULTURE scientists say that tom turkeys have higher blood pressure than turkey hens. Also, they say that the pressure increases with age. This suggests hardening of the arteries.

DEW may be a great source of moisture, more than one would think. In some areas the accumulation of dew can total as much as ten inches of water a year, and can account for 20% of the total moisture. While most of the dew on the Canadian prairies undoubtedly evaporates in the early morning sunlight, in other parts of the world it stays around a little longer. In tests in Ohio, dew accounted for as much as .08 inches of water in a single day, and at times supplies a monthly precipitation of one inch or more.

THE Province of Saskatchewan, with a wheat acreage of 13 million, still has nearly 64% of the total in the three prairie provinces.

THE Canadian Poultry Review reports that the Colonial Poultry Company of North Carolina now has a fourth "plant" in operation and has a total production capacity of 1,000,000 ready-to-cook chickens a week.

IN 1925 North American hens were laying at the rate of 112 eggs per hen per year. This number had increased to 192 eggs per hen per year by 1955 and the trend to increased production continues.

WHEN Christopher Columbus made his second voyage to America in the year 1495, he carried cattle and other farm animals with him to the West Indies.

THE agricultural and industrial growth in Canada is being paralleled by a growth in the nation's railways. The Canadian National Railway has placed new car orders in the value of \$19,000,000. Delivery of 1,850 units will commence early this year, and will include 1,150 triple hopper cars, 200 fifty-ton steel refrigerator cars, 200 seventy-ton gondola cars and 300 flat cars.

DON'T forget to trim the feet of your herd bull at least once a year.

MANITOBA dairies are boosting butter production after the production slump of early 1957, and it now appears that more butter will be made in Manitoba this year than last. An increase in butter prices during the fall months no doubt contributed to this higher production. Cheese production also is showing an increase.

The Forrest Fireflies girls have won the T. Eaton Co. trophy for Manitoba for 4-H clothing clubs, and their club was just behind the winning Elkhorn club in competition for the Eaton food club trophy. 201 clubs competed.

Saskatchewan householders can now sell their used oil-fired furnaces providing the burner on the furnace bears a recognized testing laboratory approval label, the minister in charge of the Fire Prevention Act has stated.

According to a nation-wide survey of consumer opinion two out of every three people in the United States rate milk as the most nutritious food they buy. The study rated milk higher than five other common foods.

Winter is a good time to have a medical check-up. Summer is the most strenuous time for those in the farming industry and farming is a life which becomes increasingly active in the spring.

From figures available, fruit and vegetable crops appear to be the only ones showing larger production for 1957.

With the most favorable conditions in some parts of the U.S. in 16 years the department of agriculture there forecasts a total of more than one billion bushels of wheat for 1958.

Just under 36,000, or 5% of Canada's 700,000 farmers, made enough money in 1955 to pay income tax; the figure for 1956, will no doubt be lower.

A statistician has estimated that if all the food in the world could, over night, be equally divided that all of the world's people would go to bed hungry.

Massey-Harris-Ferguson recently announced sweeping changes in its marketing operations. It is introducing a new brand name a new symbol, a new unification of products and sales, a new tractor and a new combine. All of its products throughout the world will now be in two standard colors — red and gray.

No tree is more closely associated with the history of man and the development of civilization than the olive tree, which still continues to produce so much oil for the benefit of so many people.

The United States Department of Agriculture is said to have discovered a method of processing fresh cream by adding sugar. Other than having an extra-sweet taste the cream is said to have all the advantages of fresh cream and will keep at room temperatures for as long as six months. It can't be as simple as it sounds as a patent has been applied for on the process.

One-third of the volume of all freight carried by Canadian railways consists of wheat shipments.

Recent claims of successful treatment of Bangs disease in cattle with patent medicine are not founded on scientific evidence, says the Alberta Veterinary Medical Association, and such products are not legally licensed for sale in Canada the Association states.

At Harper Adams Agricultural College, Newport, England, pig fattening huts of mesh-enclosed straw have steps leading up to and down from the entrance to keep out ground drafts.

A surplus of \$393,127.99 — the largest in history — was shown by the Calgary Exhibition and Stampede Limited in 1957.

The study of trees and tree planting in the Prairie Provinces has been carried on continuously for more than 50 years by the Forest Nursery Station at Indian Head, Saskatchewan. In co-operation with farmers, thousands of prairie shelter-belts, and millions of trees have been planted from the Indian Head Station.

How much help does the farmer get when he gets help? The U.S. News and World Report, in an article, breaks down the "5 billion" dollars referred to as money for U.S. farm relief in 1957, and states that of the amount \$806,000,000, is all that went directly into the pockets of American farmers.

According to the director of Agricultural Marketing Service of the U.S., the most significant change in dairy farming in recent years is that small herds are disappearing from the scene and large herds are getting larger.

During the last 50 years the agricultural area of England and Wales has declined by some 2¼ million acres, or approximately an area equal to that now being seeded to wheat. This farm land has been lost to urban and industrial development. It is estimated that a further 600,000 acres will be lost for the same reason in the next 20 years.

In Manitoba this past year, while field crop incomes were down about 35 to 40 per cent, the production of cattle has risen about 30 per cent in the last five years and the expansion is expected to continue.

In 1957 the acreage under lease to ranchers and farmers from the Saskatchewan Department of Agriculture reached an all-time high of more than 7½ million acres.

Pig huts at the North of Scotland College of Agriculture, in Aberdeen, are tilted to give them a sloping floor. As piglets are born they roll out of harm's way.

In England and Wales there is one tractor to every 39 acres of arable land.

The average wheat yield in the United Kingdom last year was 45.9 bushels per acre; barley, 51.0, and oats 59.4.

In India drouth has greatly reduced the rice crop in northwest sections where about half of the nation's rice is grown.

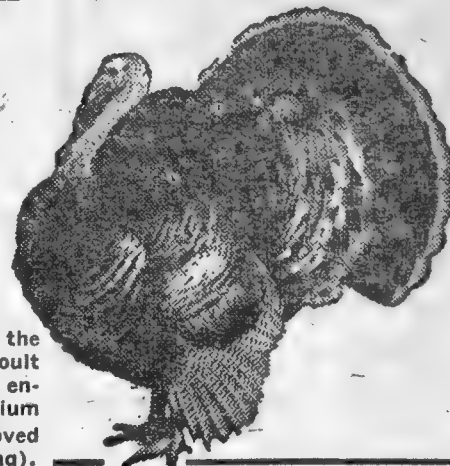
The National Farm Radio Forum says that according to its findings the minimum amount of capital needed to farm is from \$20,000 to \$30,000.

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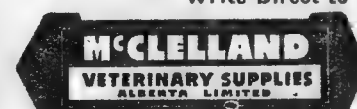
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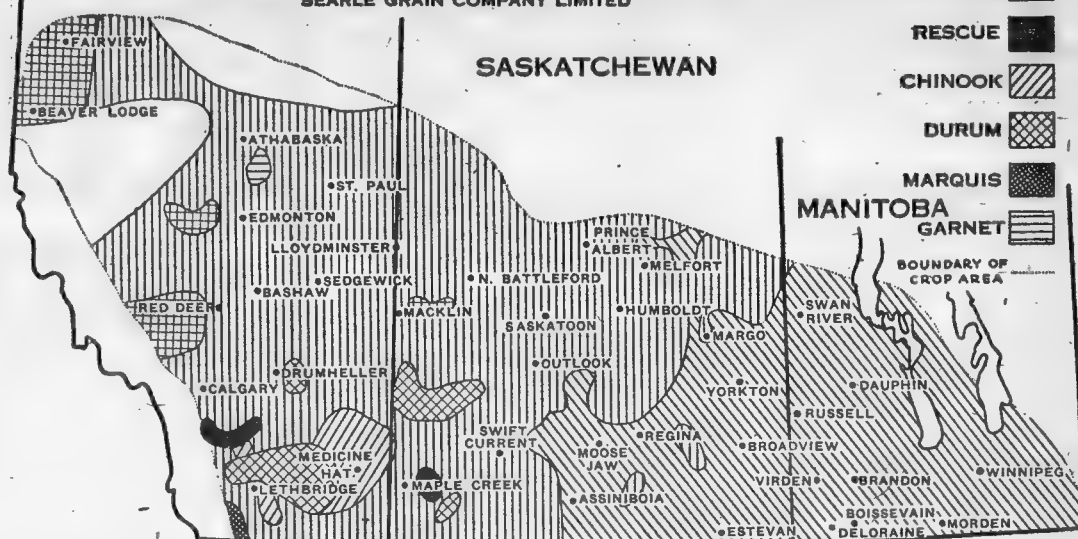
MAP INDICATES WHERE EACH VARIETY IS DOMINANT.

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SASKATCHEWAN



The annual survey made by the Searle Grain Company on the distribution of wheat varieties shows that in 1957 Thatcher still accounted for more of the wheat acreage (43.2%) than any other single variety, although for the second year since 1942, it failed to occupy more of the wheat acreage than all other varieties put together. Selkirk was second with 28.3% . . . up 3% from last year, while Rescue was third with 4.4%. Chinook, Saunders, and Lee remained in that order.

All Durum wheat varieties accounted for 10.1% of the total wheat acreage.

## Calgary Seed Fair

**THE** 12th Annual Seed Fair  
and Short Course will be  
held in Calgary, March 6th and  
7th, in the Agricultural Build-  
ing, Exhibition Grounds.

## Opportunities for agricultural careers

**THE** great changes that have  
taken place in agriculture  
in the past few years have  
brought a demand for more  
trained agriculturists than ever  
before, and it is expected that  
the demand will continue to  
grow. New opportunities have  
opened up in various agricul-  
tural industries and related  
businesses which absorb an  
ever-growing share of today's  
graduates. In spite of this de-  
mand there has been a steady  
drop in the enrollment of the  
agricultural schools and col-  
leges of Western Canada.

## The war against nematodes

**SEVERAL** heather plants had  
to be refused entry into  
Canada during the summer by  
officials of the Plant Protection  
Division, Canada Department of  
Agriculture. The action became  
necessary to prevent the possi-  
bility of the Golden Nematode  
being introduced into Canada  
on the roots and adhering soil of  
the heather plants. This partic-  
ular nematode, a microscopic  
member of the worm family,  
which can do great damage to  
growing plants, is unknown in  
Canada and so regulations are  
justified to prevent its introduc-  
tion into Canadian soil.

An additional threat arose  
when it was found that to pre-  
serve freshness, some of the  
sprigs of heather had been em-  
bedded in raw potatoes. The im-  
portation of potatoes from Eu-  
rope is prohibited to guard  
against the introduction of po-  
tato wart disease. This disease,  
which if established, could be  
most detrimental to Canada's  
potato crop, is unknown in Can-  
ada except in Newfoundland.

The potatoes were destroyed.

## Cows need Vitamin A

**VITAMIN A** deficiency in  
calves and growing cattle  
has been responsible for serious  
financial loss to cattlemen, state  
the Canada Veterinary Services  
Branch. This vitamin is ob-  
tained from fresh green pasture,  
green, leafy hay and good qual-  
ity silage. Cattle on good pas-  
ture, particularly from May to  
July, store considerable Vitamin  
A and the reserve can be drawn  
on in winter months.

If cows during pregnancy and  
nursing cannot meet the Vita-  
min A requirements of the calf,  
scours, pneumonia, blindness or  
convulsions may result. Many  
calves will be born weak and  
die early in life. Where Vitamin  
A is not supplied in the feed  
supplements can be used to ad-  
vantage. The amount required  
depends on the feed being used,  
but for practical purposes, says  
the Branch, 30,000 i. u. of Vita-  
min A can be given daily to  
cows from January to calving  
time, and from 10,000 to 20,000  
i.u. supplied daily to feeder  
cattle.

## Plant bulbs pre-inspected

**A**N ounce of prevention is  
worth a pound of cure is  
apparently the policy of the  
Plant Protection Division, Can-  
ada Department of Agriculture.

During the last few years,  
Canada has sent inspectors to  
the Netherlands during the bulb  
shipping season to inspect bulbs  
intended for export to Canada.  
Last year 1,441 consignments  
containing some 42,000,000  
bulbs were inspected and passed  
for delivery to Canada. Au-  
thorities say the scheme is con-  
sidered better, both by Dutch  
exporters and Canadian import-  
ers than the old system of in-  
spection on arrival.

# PUBLIC NOTICE

## Province of Alberta

Notice is hereby given that the Government of the Province of Alberta has appointed a Commission and has authorized that Commission to study and consider the aims and objectives essential to maintain a proper and adequate educational program for pupils of the elementary and secondary schools of the Province, and to inquire into the various aspects of elementary and secondary education as they relate to the schools of Alberta. Interested persons may secure a copy of the terms of reference of the Commission by writing to the Secretary.

Notice is further given that during the months of May and June the Commission will hold public hearings in Edmonton, Calgary, Lethbridge, Medicine Hat, Red Deer, Grande Prairie and, perhaps, in other places for the purpose of receiving briefs and submissions from persons and organizations relative to the matters under deliberation. Publication will be made in the press, in the localities selected, of the times and places of the public hearings, at which times and places all interested parties must be prepared to present their respective submissions.

Ten copies of all briefs and submissions must be filed with the Commission Secretary during the interval of time March 1st to April 15th, 1958. All submissions are to be typewritten and double-spaced, using one side of the paper only.

Dated at Edmonton this 3rd day of January, A.D., 1958.

**R. E. REES**

Secretary,

Royal Commission on Education,  
Room 723, Administration Building,  
Edmonton, Alberta





Climaxing the current show season, Rosafe Preceptor (left) has been selected as the All-Canadian Aged Holstein bull, and Silvia Pabst Texal as the All-Canadian Aged Holstein cow.

Both won Grand Championships at the Royal Winter Fair, Toronto, last November. Preceptor is owned by Dunrobin & Elmcroft Farms, Beaverton, Ont., and Silvia by Pickard & Clark, Carstairs, Alberta. This final big honour was awarded by the judges at the leading Canadian shows. Preceptor was also Grand Champion at Peterboro Championship Show, while Silvia took the Grand Championship at Calgary, Saskatoon and Regina.

## Herringbone milking

A NEW kind of milking parlor promises to make one-man herds out of strings that now keep two men busy, reports Dairy Digest. It is called the "Herringbone" in New Zealand. The name and the exceptional speed of milking come from putting three times the usual number of cows diagonally into each side of the parlor. This represents another step in the parlor trend toward placing the cows at exactly the right height and in exactly the right position for fastest milking.

With the "Herringbone" only the "business" end of the cow is next to the milker. You may see both the side and rear of the udder yet udders are only three feet apart down the line. And it's only a step and a half-turn to the cows on the opposite side of the pit. One farmer milks 65 cows in 64 minutes by himself with a 16-cow "Herringbone" — eight in each side.

Here the "Herringbone" parlor is a new trend, but in New Zealand it is old stuff. There they figure one man can milk 60 cows an hour in a 12-cow unit or 75 to 80 cows an hour in a 16-cow unit.

## Nitrogen fertilizers

FACTS about Anhydrous Ammonia may clear up a number of misconceptions that seem to have cropped up lately. The results of many trials and tests carried out by the University of Alberta and the Dominion Experimental Farms throughout the province conclude the following:

(1) that there is no difference in the effectiveness of Anhydrous Ammonia as compared to other nitrogen fertilizers when applied at equal rates of actual nitrogen per acre under normal conditions.

(2) Unless the cost of applying Anhydrous Ammonia is as low or lower than other nitrogen fertilizers, there is no added advantage in using it.

**CAUTION:** Analyze the cost of Anhydrous Ammonia application equipment very closely before buying, say the Field Crops Branch, Soils and Weed

Division. Unless very large acreages are to be fertilized at relatively high rates, purchase of such equipment may not be a wise investment.

(3) Fields where nitrogen fertilizers have been used have given profitable yield increases on between one-third and one-half of the farms where tests were located.

(4) It has been generally established that where Alberta grain crops obtain profitable yield increases from nitrogen fertilizers they will usually also give an additional profitable yield increase from a recommended phosphate fertilizer.

Recommendations and suggestions about fertilizers are outlined in the revised "Fertilizers in Alberta" publication available from your District Agriculturist or the Field Crops Branch, Alberta Department of Agriculture, Legislative Bldgs., Edmonton.

## Power-steering for tractors

POWER steering for tractors is on the way. According to the Imperial Oil Farm News, power steering was first developed to solve the problem of steering huge military vehicles during the war. It later caught on in the automobile field and is now moving to the farm.

Engineers say that power steering will make the tractor work not only easier but more efficiently. Power steering eliminates wheel fight and shock even over the roughest fields. It holds the wheel firmly against the furrow when plowing and permits the tractor to be controlled by simply "pointing" where the driver wants it to go.



"You're going to have to speak to Junior about playing with his pogo stick in the basement."

## Applicator for seed treatment

THERE could be a last minute rush for seed cleaning again this year. Those farmers that have their own equipment for cleaning and treating seed may find good use for an applicator that is being distributed free of charge this month by the Panogen Company, who distribute their seed disinfectants through Green Cross Products.

The applicator, which is being given away with every purchase of a gallon or more of Panogen, measures the dosages reputed for proper treatment of the various seed grains. It is mounted on a display card with simple, accurate instructions on the amount and rate of application, according to the method by which the seed is handled during the treatment, i.e., by auger,

Interne: "Are you married?"  
Patient: "No, I've only been run over."

The Farm and Ranch Review  
is one of the best farm journals.  
It has real advertising appeal.

## "DO-IT-YOURSELF"...

PLUMBING & HEATING INSTALLATIONS.

### JEWEL ENTERPRISES

If you can't afford it, DO IT YOURSELF, AND SAVE!

Save money, by installing yourself, that new Bathroom or that Automatic Heating System. Let the years of experience acquired by our Engineers benefit you. Do it yourself and feel confident you are doing it right. Plans and Instructions, with Detail drawings are available for YOUR home. For further Information please fill out Form below and mail to:

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ADDRESS .....

City .....

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# LOW COST RUNNING WATER



## SHALLOW WELL PUMP

Here is a pump that has everything: Positive pressure; safety; quietness. Only one moving part... a stainless steel rotor turning in a cushion of rubber. No pistons, gears or belts! All working parts totally enclosed! Never needs oiling and is fully automatic! It is the simplest pump to install, and is famous for durability. Stands up even when pumping sand and silt. Capacities from 250 to 800 gallons per hour. Write today for illustrated, descriptive literature on this amazing R & M Shallow Well Pump.

THE **ROBBINS & MYERS** COMPANY  
of CANADA LIMITED—BRANTFORD, ONTARIO

# Alberta Wheat Pool

## Agents

### have great responsibilities



Back row: Lionel Montpetit, Bill Wyse, Gerald Hall, Jim Rhyason, Norm King, Stanley Hagg, Buster Dillingham.  
Centre row: Nich Kurceba, Lyle Johnson, Art Tiedemann, Swen Odland.  
Front row: Rees Powell, Keith Phillips.

They must perform all the usual duties of an elevator agent and handle the members' grain efficiently and economically.

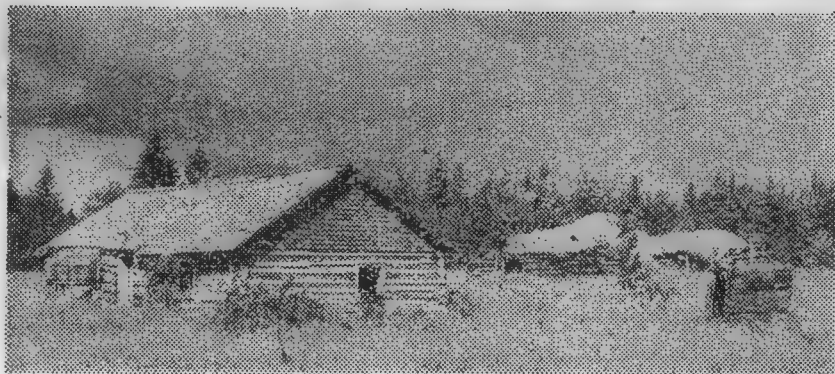
Besides that, they must fully understand and help to promote co-operative philosophy and the ideals of the Wheat Pool.

They are not chosen in a haphazard manner. Great care goes into their selection to be sure that they have a sympathetic understanding of farm problems as well as ability to operate an elevator and handle grain.

After they are chosen to represent the Wheat Pool, they are given special instruction in its history and background. They are trained to fulfill the pool objectives as laid down by its farmer members.

The above is a group of young men who have recently taken charge of Wheat Pool elevators and are seen here at the conclusion of their indoctrination course.

These are some of the reasons farmers deal with confidence at their own —



"Do-it-yourself" carpentry was not unknown to the pioneers. Most old buildings such as these were made from materials at hand, and withstood the elements for generations. The old sod roofs were replaced later by shingles.

## Farm buildings of an older era

by Maud Strike

THE hardy pioneers who by their labor opened the west were often compelled by force of circumstance to erect buildings with whatever material was at hand and by doing it themselves, whether they really understood the rudiments of carpentry or not.

There were those who were fortunate enough to secure shingles for the roof but many were logs with ordinary sods for protection. The latter never did really provide the protection required and it was not unusual during severe rainstorms for a roof to leak like a sieve. One pioneer lady partly solved her problem during the sleeping hours by opening an umbrella over her head to keep herself dry. And heavy three-day rains were not uncommon.

Practically all buildings were constructed of logs, generally hand hewn in order to be able to chink them better between the logs, and further seal them by applying wet mud with a trowel. The worst part of the latter labor was that it almost always had to be renewed every year as during the summer months there was sufficient sunshine to dry the mud out and cause it to fall and leave the places between the logs and chinking wide open to the winter winds.

A sod-roofed barn was not too bad, but many were covered

with a thick layer of straw and these leaked during the rainy season just as though there was no covering at all. Only during the winter months did they provide adequate shelter in this respect.

Oxen, cattle and horses were of the hardy variety. They took it all in their stride — and thrived on it. None of them were pure-bred, but they were tough and those hardy animals proved themselves the backbone of the farmer who without them would have made but little progress.

Most of the buildings that housed these hardy pioneers and their stock are a thing of the past, and the few that remain are derelict buildings. Newer and more modern buildings have been erected to take their place. Likewise most of the hardy animals have disappeared. Few housewives set their hens to raise chicks in this day. Instead they buy baby chicks from the hatcheries, a thing undreamed of in pioneer days. Yet hundreds and thousands of chicks were raised by the farm housewife by this method. And like everything else in bygone days when the west was young, they were remarkably healthy. Disease was almost unheard of and the flocks of assorted mixtures of breeds carried on year by year with few mishaps.

The same applied to the build-



Early pioneer house as it was in 1919. The late W. Shaw, the owner, is standing in front.

ings used. Roughly constructed though they might have been they stood the test of time and here and there one sees a deserted house standing today in almost perfect condition. One such house still stands and though it has not been lived in for over forty years it still fills the bill as a granary or storehouse. The windows have long since disappeared but no matter how severe the storm it has never tumbled, though it stands on a knoll where the vicissitudes of nature hurl their full impact against it at every turn of the weather.

This building and others like it stand as a tribute to the hardy pioneer and his struggle against nature. Many of these old-timers have long since passed on but the results of their labor still remain and is likely to remain through years to come.

### Preventing pneumonia in hogs

**T**WIn beds and Hollywood beds don't mean a thing to porkers, but raised beds can ward off pneumonia and reduce arthritis and rheumatism.

According to Dr. E. E. Ballantyne, the director of Alberta's veterinary services, if there isn't much bedding available, a raised bed for pigs to lie down on will at least keep them dry and away from the cold, damp floor. Cold in itself isn't too hard on pigs, but a combination of cold and dampness can be serious.

Last year, pneumonia was the third highest disease condition diagnosed in 1,838 hogs examined at the Provincial laboratories in Alberta. It was exceeded only by enteritis (inflammation of intestines) and erysipelas.

The changeable weather of fall, winter and spring plays a hand in causing pneumonia, but poor ventilation, rapid temperature changes in the hog house, wet beds, overcrowding and overheating foster the disease too. A heated hog barn can make a big difference in the pig's favor. A great deal of pneumonia in hogs can, therefore, be put down as a faulty management disease.

### New crested wheat grass seed

**A** NEW and promising variety of Crested wheatgrass has been licensed and is available in commercial quantities this year. It is called Summit, and was developed at the Forage Crops Lab. at Saskatoon. It has yielded 10% more hay than the commonly grown variety Fairway, and grows 3 to 4 inches taller. It performs particularly well in mixture with alfalfa, and is recommended for the more dry, sandy areas. Seed supplies of Summit are limited, so farmers who are interested should contact their seed merchants early.

### Alberta 4-H meetings

**T**HE series of 4-H club meetings is in full-swing throughout Alberta this month. Arranged and conducted by the 4-H staff of the Provincial Department of Agriculture, the courses are designed to bring out new ideas in 4-H organization, possible inter-club activities and discussions of problems affecting clubs in the district. The courses are being held at the request of the club leaders and before they conclude this month, it is expected that between 600 and 700 leaders and assistants will have attended.

### Seaway tolls on wheat

**W**HAT the St. Lawrence Seaway will mean to the Prairies remains to be seen, but at least one Provincial Premier feels that high seaway toll charges could well offset any possible benefits. Premier Douglas Campbell, of Manitoba, has asked the Canadian Tolls Committee and the federal Government that wheat shipments be entirely excluded from the toll charges.

He suggested that the costs of construction should not be recovered by tolls alone, but that much of the cost could be charged to the benefits to national defence, and to hydro-electric development. Mr. Campbell's brief pointed out that certain regions will derive the greatest benefit from the Seaway, without paying a proportionately greater share of the cost. He said that the presence of the Great Lakes transportation system has to some extent reduced the handicap faced by Prairie shippers, due to their inland location, but that high toll costs and other factors might negate any benefits of the seaway system.

### "Old wives" cures

**T**HERE are many "old wives" remedies that effectively check certain insect pests. Freshly cut pumpkin leaves, rubbed on cattle and horses, reputedly repel flies. In certain European countries it has long been a practice to put a ring of bean leaves on the floor around a bed at night with the hairy under-sides upward. The bed-bugs become trapped on the hairs of the leaves and are devoured by their cannibalistic companions.

### Ford motors

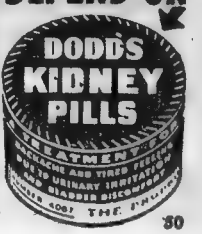
**T**HE Ford Motor Company of Canada has built 2,313,644 V-8 engines as of 17 December, 1957 — more than have been produced by all other auto manufacturers in Canada combined. South of the border, the Ford Company has produced 25,000,000 V-8 engines by this same date. This engine type is one which experts told Henry Ford a quarter of a century ago, could never be mass produced.

### 'Hoppers on their way

**S**OUTHEASTERN Saskatchewan can start bracing itself for a severe grasshopper outbreak this summer, according to Dr. Paul Reigert, Saskatoon entomologist. Dr. Reigert bases his prediction on a count of egg pods in the area and adult grasshopper surveys during the past summer.

### YOU CAN DEPEND ON

When kidneys fail to remove excess acids and wastes, backache, tired feeling, disturbed rest often follow. Dodd's Kidney Pills stimulate kidneys to normal duty. You feel better—sleep better, work better. Get Dodd's at any drug store. You can depend on Dodd's.



50

### Famous Bona Allen Saddles

"The Stockman" -- **\$149.00**

BONA ALLEN SADDLES ARE  
UNCONDITIONALLY GUARANTEED

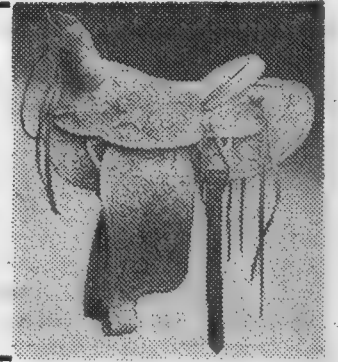
We Pay Shipping Charges.

**McINTYRE'S SADDLERY**

SWIFT CURRENT, SASK.

"Saskatchewan's Finest Western Store"

Write for FREE 1957 Catalogue.



You get **THE BEST** when you buy . . .

## THE ROBIN-FREEMAN GRAIN CLEANER

*Saves You Money  
Makes You Money*

- Absolutely eliminates wild oats from wheat.
- Increases grades on your grain.
- Saves dockage.
- Cleans all grains.
- Assures clean seed.

The ROBIN-FREEMAN is the most efficient, fast and economical GRAIN CLEANER money can buy.

See your ROBIN Dealer or write for

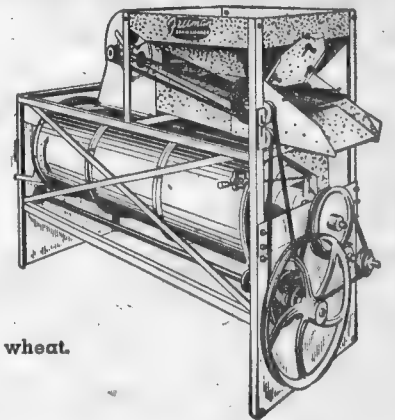
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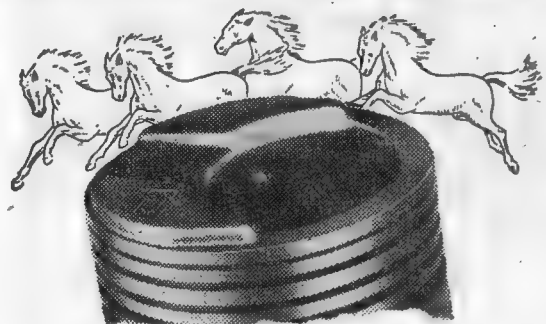
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Built for a lifetime of  
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## ADD EXTRA "HORSES"

...with M&W add-POW'R oversize pistons and sleeves



- Oversize, light weight — they add 3 to 12 more horsepower to your tractor — cut fuel and repair bills.
- Slip-in, replacement sleeves — need no block reboring.
- Offset pins and chrome piston rings give longer wear — balanced to reduce vibration for safe extra power that even an old tractor can handle.

Write for free literature — your dealer can install M & W pistons in your tractor.

Falcon Equipment Co. Ltd.,  
299 Danforth Rd., Toronto 13, Ont.  
2875 St. Joseph St., Lachine, P.Q.  
Allied Farm Equipment Ltd.,  
Box 53, Winnipeg, Man.

Grain Belt Farm Equipment Ltd.,  
1348 Halifax St., Regina, Sask.  
ALBERTA & BRITISH COLUMBIA,  
Northwest Farm Equipment Ltd.,  
Box 351, Calgary, Alta.

## Beer money

UNITED STATES farm economy obtained a \$240,000,000 income in 1957 from American brewers who use over 40 lbs. of farm produce per barrel.

## New barley prize-winner

PARKLAND, the new malting barley licensed from the Experimental Farm, Canada Department of Agriculture, Brandon, Man., in March, 1956, and released for the first time in 1957 for commercial growing in eastern Canada, has won top honors for the Ottawa Valley in the 1957 Ontario Barley Contest. The first three prizes in this contest were won with Parkland entries, with official yields of 67.0, 67.7, and 62.5 bushels per acre respectively.

## Potash mining for Saskatchewan?

INDUSTRIES are slowly but surely coming to Saskatchewan. The latest possibility is centered in the investigation of the potash potential of the Wynyard district.

For three years the United States Borax and Chemical Corporation has been exploring there. The company holds leases for about 100,000 acres in the district and five holes have been drilled this year. Altogether since 1955 the company has drilled 14 holes.

Since sylvite ore, which contains potash, is found at about 3,200 feet, considerable exploratory work is necessary in gathering the data needed to consider mining operations.

Two other companies are exploring potash possibilities in Saskatchewan. International Minerals and Chemicals announced this summer plans to spend more than 20 million dollars on a potash mine at Esterhazy.

## Grit not needed

LAYING hens may not need grit after all! A series of tests at the Brandon Experimental Farm showed that egg production and feed requirements to produce a dozen eggs were not affected by the addition of grit to the diet. Average body weight and egg weights were similar in all test groups of birds being tested and egg thickness was not improved by grit feeding.

In the tests, an all mash ration was formulated to be complete in all the dietary nutrients, including the necessary mineral supplements. Eighty birds, confined to individual laying cages, were allotted to each of the following treatments: all-mash with no grit added; mash plus 15-grams of grit per bird fed once each month; mash containing one per cent-grit; mash with grit fed free-choice.

Under the conditions of this

particular experiment the extra cost and labour involved in adding grit to an all-mash ration was wasted effort.

## Dining room deluxe

FOUR years ago the Charlottetown, P.E.I., Experimental Farm constructed a self-feeding, horizontal silo on a concrete floor inside a pole barn. A simple type of feeding rack was moved to prevent tramping and wasting of the silage and ensure a more even consumption over the surface of the end.

Every year since then, the Farm reports, this silo has been filled with second cut, long grass harvested with a forage harvester. Having the silo indoors and on a concrete floor avoided the problems of mud and snow often associated with outside silos and the cattle have done very well.

## Canning milk for market

SOMETHING new in canned milk may soon appear on the market. A U.S. team at the University of Wisconsin is taking out a patent on a process for sterilizing and canning milk that will keep the milk's fresh characteristics for several months without refrigeration. The process holds promise of reducing marketing costs, equalizing milk prices and making distant markets more accessible to farmers.

## Cheese candy

THERE'S a new kind of candy coming on the market, using dairy products as a base. Made of 40% Swiss cheese, processed and slightly sweetened, and available as chocolate covered or with fruit centre, the candy is supposed to have less calories and less sugar than the average chocolate bar. It is reported from Wisconsin.

## White paint for a cool barn

IT'S no problem in winter, but in the summer the direct sun's rays can turn galvanized steel and aluminum buildings into an uncomfortable hot-house. One way to overcome this is to paint the outside with white paint. This has been known to reduce the inside temperature of the metal by as much as 42 degrees, while the general air temperature of the building should drop from 25 to 30 degrees. The white paint on the outside reflects the sun's rays.

## Diet for insects

THE dieticians are even working on the diet of insects now. University of Manitoba scientists are engaged on a project to make grasshoppers and other bugs develop a taste for weeds instead of farmers' crops.

# FREE!



## Panogen APPLICATOR

NOW OFFERED BY YOUR  
LOCAL DEALER WITH  
PURCHASE OF WORLD  
RENOWNED

## Panogen LIQUID Seed Disinfectant

LIMITED TIME OFFER —  
SEE YOUR LOCAL DEALER  
FOR DETAILS.




## NOW treat seed on - the - farm with the original Liquid Seed Disinfectant and get APPLICATOR FREE!

The applicator, a unique device that attaches to the Panogen bottle and measures the proper dosage of liquid Panogen, is yours free now at your local dealers. Normally sells for \$1.95.

This, with Panogen, gives you a modern, dustless, seed treating process for use with your grain auger or other grain moving equipment.

Panogen, the original liquid seed disinfectant, destroys diseases on your seed — protects seed in soil.

Red-tinted Panogenized seed helps more seedlings come up... they grow faster and healthier.

Experiment stations all over the world have proved Panogen is an effective and potent disinfectant for use on wheat, oats, barley, flax.

Panogen's success is attributed to an exclusive form of mercury that dis-

infects seed by contact of the liquid and by release of powerful vapors which penetrate deep into seed kernels to destroy disease.

Since Panogen is a true ready-mixed liquid, there is no dust — no preparation, and it clings permanently to the seed coat.

Panogen costs just pennies... and treatment application is simple and convenient with the Panogen applicator. Get yours now — while free offer still lasts — from your local dealer.

If your seed is custom cleaned and treated, look for the red Panogen drop-let and be sure the bag tag says "Panogenized"—it's your assurance of proper seed protection.

DRINOX—the new liquid insecticide seed treatment — protects your seed against wireworms, etc. EXTRA CROP INSURANCE.

### FREE BOOKLET

16 pages. Describes crop diseases, how seed treatment works, how it contributes to better stands and yields. 30 photos. Separate section on wheat, oats, barley, flax, cotton, sorghum. Mail coupon at right, for your copy.



GREEN CROSS PRODUCTS,  
100 Princess St., Winnipeg 2, Man.

- ☐ Please send free booklet, "The Benefits of a Modern Seed Treatment."  
☐ Send name of local Panogen dealer.

Name .....

Address .....

Prov. ....

PLEASE PRINT

# FUNLAND

THE FAMILY ENTERTAINER

by A.W. NUGENT  
The WORLD'S  
LEADING  
PUZZLEMAKER

4 OF MARY'S TAME BIRDS ARE  
HIDING SOMEWHERE HERE.  
CAN YOU LOCATE THEM?

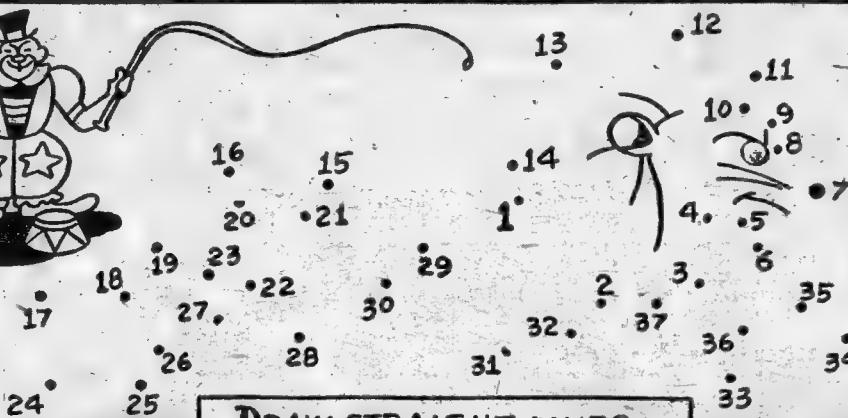


ONE CORRECT SOLUTION: CAT HAT, DEER EAR, CLAW PAW, BEE TREE, COW CHOW, DIG TWIG, TAIL PAIL, GOAT COAT, MAN CAN, CLOCK LOCK, CORN HORN, SNAKE RAKE, BEAR HAIR, FLY TIE, FORK CORK AND FISH DISH ARE 16.



ONE CONCEALED BIRD IS FACING DOWNWARD IN THE LOWER LEFT CORNER. ANOTHER IS IN THE UPPER LEFT CORNER. THE THIRD IS AT THE RIGHT ABOVE MARY'S HEAD. THE FOURTH IS BELOW THE THIRD BIRD.

GET INTO THE  
GACT.  
JOIN THE DOTS FROM  
ONE TO THIRTY-  
SEVEN.



DRAW STRAIGHT LINES.

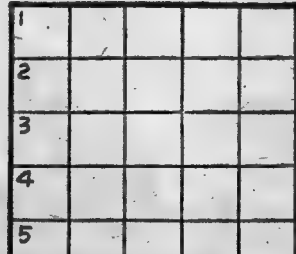


IF YOU PRINT THE CORRECT WORDS IN THE  
BOXES, READING ACROSS, THE FIRST AND  
LAST ROWS OF LETTERS READING DOWNWARD  
WILL SPELL TWO WORDS OF ADVICE TO FARMERS.



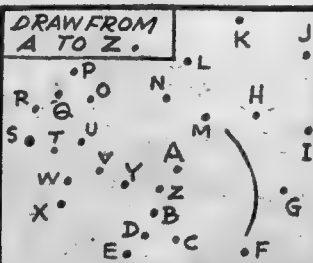
THE DEFINITIONS ARE:

1. A TOOL FOR SMOOTHING BOARDS →
2. A GIRL'S FIRST NAME →
3. TO CHANGE →
4. RELATING TO THE NAVY →
5. TO SCORE →



1. PLANE 2. LAURA 3. ALTER 4. NAVAL 5. TALLY.

START WITH A BOXING  
GLOVE. ADD LINES TO  
IT TO DRAW A BOXER.

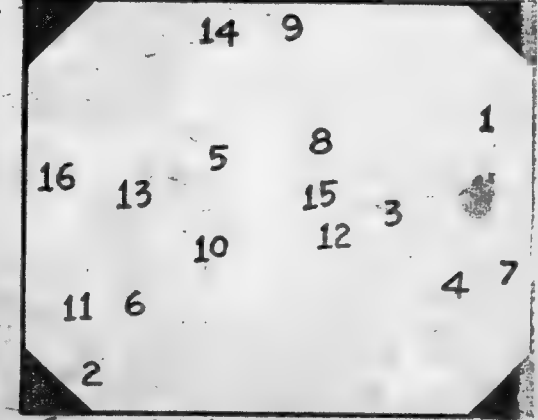


Kiddie Corner

WHERE AM I FROM? PRINT  
THE FIRST LETTER OF EACH  
SINGLE NUMBER UNDER IT TO SEE.  
3 8 9 9 8 7 6 8 8

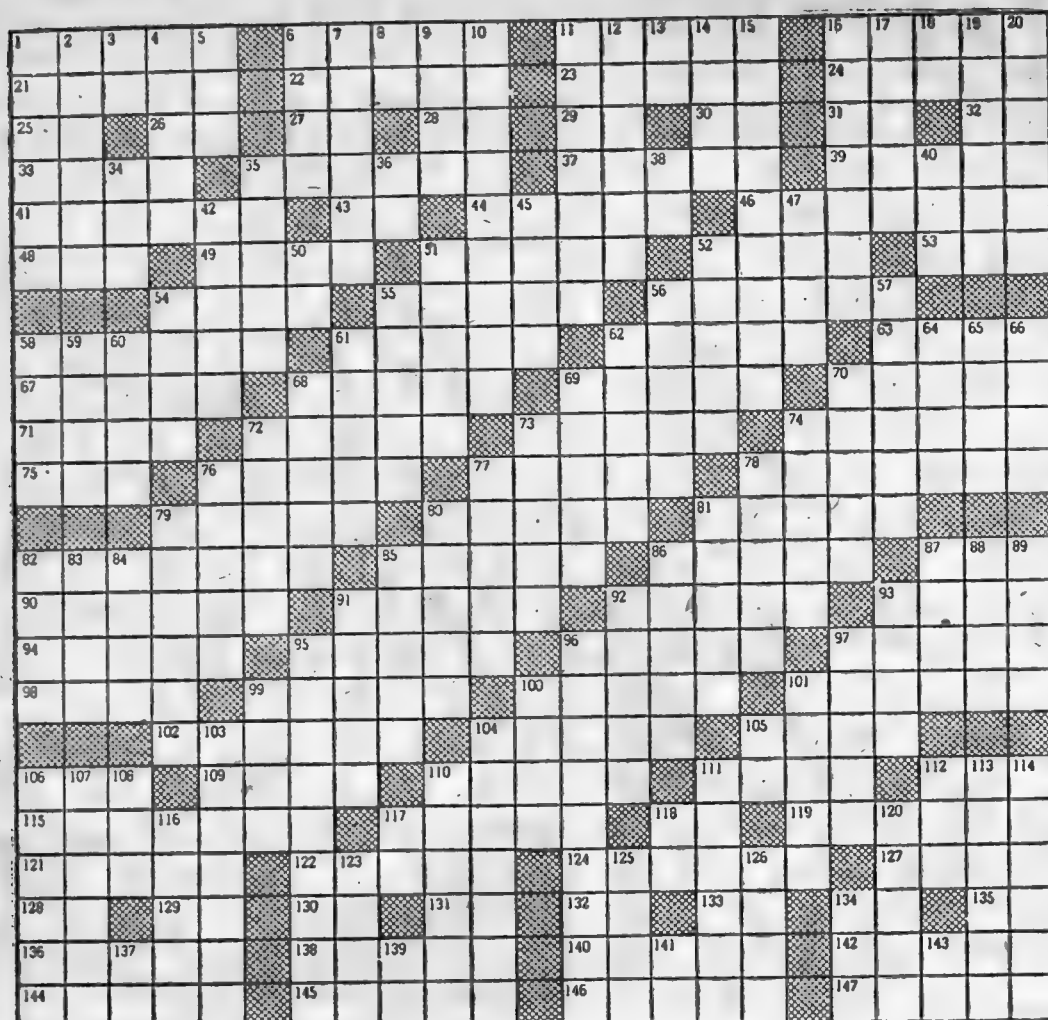


TRY  
TO  
CROSS OUT  
ALL THE  
SIXTEEN  
NUMBERS  
BY  
DRAWING  
FOUR  
STRAIGHT  
LINES.



DRAW FOUR LINES THROUGH THESE NUMBERS:  
(14, 8, 3, 4) (9, 5, 6, 2) (11, 10, 15, 1) AND (16, 13, 12, 7).

# Crossword Puzzle



## ACROSS

- 1 Italian poet  
6 City in Massachusetts  
11 Unit of electrical capacity  
16 Question closely  
21 Wild sheep of Northern India  
22 Place of combat  
23 Idol  
24 Rent asunder  
25 Egyptian sun god  
26 Syllable of scale  
27 Babylonian deity  
28 Bone  
29 Greek letter  
30 Exists  
31 Alleged force  
32 Greeting exclamation  
33 A Great Lake  
35 Take into custody  
37 English race course  
39 Color pearl blue  
41 Covering for foot  
43 Paid notice  
44 A little island  
46 To grow better  
48 As it stands (mus.)  
49 Narrow inlets  
51 Berate  
52 Let it stand  
53 Footlike part  
54 Matures  
55 Country of Europe  
56 Route  
58 River of S. America  
61 Talk idly  
62 Inclined trough  
63 Male forebear  
67 Upper house of French parliament  
68 American professor and poet  
69 Task  
70 Stalk of grain plant  
71 Paradise  
72 Bird (pl.)  
73 Moves with a beating motion  
74 To swindle  
75 Encountered  
76 Medicinal pellets  
77 Prevaricators  
78 Swift horse  
79 Hours of one's life  
80 Explode  
81 Provisions in a contract  
82 Sums banked from time to time  
85 Bog  
86 Pummels  
87 To marry  
90 Idolizes  
91 American writer  
92 Pronounce sacred  
93 S. American country  
94 Strong winds  
95 Gusts  
96 Carpenter's tool  
97 Balance  
98 So be it  
99 Measure of firewood (pl.)  
100 Bivalve mollusks  
101 Wooden receptacle  
102 Weapon (pl.)  
104 To ice  
105 Challenge  
106 The wallaba  
109 Designed American flag  
110 Crochety person  
111 Chums  
112 Slender finial  
115 Peevish  
117 Salty solution  
118 Symbol for iridium  
119 Exercise  
121 To stay for  
122 Bone of the body  
124 Articles of faith  
127 Pronoun  
128 Symbol for radon  
129 French article  
130 3,1416  
131 I am (contr.)  
132 Avenue (abbr.)  
133 Musical syllable  
134 Hawaiian hawk  
135 Kind of palm  
136 To hinder  
138 To rub out  
140 All right (radio)  
142 To walk on

- 144 Dispatches  
145 To hinder  
146 Long for  
147 To fish

## DOWN

- 1 Compulsion  
2 Mountain in E. Turkey  
3 Symbol for nickel  
4 Domesticated  
5 Man's name  
6 Early Irish tenant  
7 Macaws  
8 Football position (abbr.)  
9 Son of Seth  
10 To chew  
11 Ultimately  
12 Entertained  
13 Symbol for radium  
14 Exchange discount  
15 Devold  
16 Moves on to action  
17 Appendage to a document  
18 Oil of vitriol (abbr.)  
19 Conduct one's self  
20 Roman urban officials  
34 Girl's name  
35 Foreigner  
36 Man's nickname  
38 State (abbr.)  
40 Child's toy  
42 Cant  
45 Fish  
47 Simple  
50 While  
51 Asterisks  
52 Makes acid by fermentation  
54 Mohammedan call to prayer  
55 Golf clubs  
56 Hews  
57 Compound ethers  
58 Artificial alloy of gold or silver  
59 Citizen of ancient Media  
60 The dill  
61 Body of water (pl.)  
62 Map  
64 Angers  
65 Speed contest  
66 Pitcher  
68 Forms  
69 Conflict  
70 City district marked by squalor  
72 Flsh (pl.)  
73 Foremost  
74 Defense structures  
76 Sheets of window glass  
77 Baits  
78 To quit  
79 Warning signal devices  
80 Musical group (pl.)  
81 Adolescent years  
82 Icelandic tale  
83 First man  
84 Mouselike rodent  
85 Repairs by sewing  
86 Censor  
87 Dam in a river  
88 Irish Gaelic  
89 Combat between two people  
91 Flying creatures  
92 A color  
93 Small opening in skin  
95 Revered  
96 Terrestrial  
97 Analyze grammatically  
98 Makes noise like dove  
100 Social division  
101 Round mass (pl.)  
103 Authors  
104 More pitiless  
105 The ambary  
106 Bestow as due  
107 American Indian  
108 Man's name  
110 Sail  
111 Choose  
112 Compass point  
113 Gate  
114 Within  
116 Heaped  
117 Prefix: two  
118 Preposition  
120 Bereft of  
123 Italian coin (pl.)  
125 Cry of the Bacchanals  
126 Mountain lake  
134 City in Paraguay  
137 Weight (abbr.)  
139 By  
141 State (abbr.)  
143 For example (abbr.)

## No bees, no cukes

THE bee is a must in successful cucumber raising say officials of the Agricultural Experimental Farm at Charlottetown, Prince Edward Island. In a study conducted the yields per acre in pounds of cucumbers under different exposure to pollinators were as follows: open pollination with plots visited by both apiary and wild bees, 9,093 pounds; bees caged on plots, 6,665 pounds; bees kept from plots by cages — no yield.

## Skill required in seed growing

A. A. Guitard, Cerealist at the Beaver Lodge Experimental Farm, says that any variety of seed, no matter what it is worth, is of little value unless pure stocks are available. The first step in maintenance of quality is the production of elite seed stock, which is not a saleable product. From this elite is produced first generation seed — the purest seed available to the non-elite seed grower. From the elite seed grower first generation seed goes to the registered grower and here again quality must be maintained and the seed kept up to inspection standards. Inspections are conducted by staff of the Plant Division of the Canadian Department of Agriculture, and it is on the basis of their reports that crop registration certificates are issued by the Canadian Seed Growers' Association. Regulations are necessarily strict. Nearly 25% of fields inspected do no warrant registration.

## Old saw — new teeth

THERE is nothing really new in ensiling fall rye, yet Leon Fontaine, of St. Paul, Alta., is giving it a new flavor.

The research Information Office of the Alberta Government reports that instead of sowing fall rye in the fall, Mr. Fontaine saves one operation, and, usually in the last week of May, he seeds down a mixture of one bushel of Olli barley, 30 pounds of fall rye and 10 pounds of sweet clover.

An average crop of Olli is harvested in the fall and then, without further trouble, 4 to 5 tons per acre of fall rye-sweet clover silage are produced the following July.

Samples of this silage, analyzed by the University of Alberta, drew from Professor McElroy the comment: "Chemically, both samples of the silage described in the laboratory report are good. The protein content is high, and the acidity almost ideal." Aside from producing a crop as well as silage, this practice has other advantages — in time and labor saving, weed control possibilities, erosion control, and the production of a livestock feed that carries the advantages of high protein of legumes, carbohydrates of grain and the pleasant odor of rye.

## Holstein horses

**LOOK** at the small print if you intend to import dairy cattle, or you might wind up with horses instead of cows. Holstein horses have been raised and bred for many years in Schleswig-Holstein for riding, light harness work and particularly for jumping. A Holstein stallion was recently brought across to this side of the Atlantic to introduce some new blood.

## Aberdeen-Angus directors

**ELECTIONS** have been held by the Canadian Aberdeen-Angus Association prior to the Annual Meeting which gets under way in Brandon on the 18th of this month.

The mail vote chose the following as directors for the ensuing year:

Malcolm Bailey, Uxbridge, Ont.  
T. A. Edwards, Arva, Ont.  
L. V. Wright, Streetsville, Ont.  
C. H. Norman Hodson, Virden, Man.  
P. R. Pedersen, Milestone, Sask.  
Wilfred Willoughby, Alameda, Sask.  
M. W. Gibb, Killam, Alta.  
T. A. Leader, Red Deer, Alta.  
D. C. Mathews, Pirmez Creek, Alta.  
W. L. McGillivray, Coaldale, Alta.

## Growing season

**SINCE** the early days of the Lethbridge Experimental Farm records have been kept of the dates of the first work on the land, first seeding of grain, first cutting of hay and of grain, and occurrence of freeze-up. These records show that November 27 is the average date of freeze-up, and April 8, the average date of the first practical field work.

Killing frosts normally occur here until May 9, or one month after the first field work is done. In the fall, frosts of varying intensity occur between September 26, the average date of the first killing frost, and November 27 when the soil has become too deeply frozen to permit further field work.

The average date of the first seeding of spring grain at the Lethbridge Experimental Farm is April 20 while that of the first cutting of grain, by binder or swather, is August 8. The number of days between these dates is 110.

## Double honey production

**TWO** women can live under one roof, if they are bees, according to an Australian apiarist, G. B. Scarfe. He has developed a system of using two queens in one hive and says this has increased the production of his 500 hives by 50%. Mr. Scarfe separates the queens by a division down the center of the hive, with a queen excluder to keep them away from the honey. Mr. Scarfe said, "I thought it should be possible to get bees to produce more honey this way without any difficulty and the scheme has proved outstandingly successful."

## Lazy-Susan feeder

**THE** ESSO Farm News tells us about a farmer in Illinois who has his own lazy-Susan silage feeder. He claims that it saves backbreaking labor and lots of time feeding his 50 head of steers on silage by using an unique, commercially-built feed bunk which encircles his tower silo.

The unit encircles the silo and is turned by an electric motor underneath. The motor drives an automobile-type wheel with inflated tire, which in turn, slowly turns the steel bunk. It will accommodate 45 head of cattle at one time. The steel trough turns on a roller underneath. A stationary top U-shaped inverted guard protects cattle's necks from rubbing on the turning unit.

Silage is thrown down by hand from the silo and is pushed out a side door into the revolving bunk until it is full. The mounting legs that hold the trough can be adjusted for height to accommodate young or old stock. The Illinois farmer claims that feeding time has been cut from 1½ hours to 20 minutes and the work could be cut out entirely if he had a silage unloader.

## Regina Show and Bull Sale

**THE** 49th Regina Bull Sale will be held March 24th to 27th. The judging of all breeds will take place on Tuesday, March 25th. The sale will start with Herefords on Wednesday, March 26th, followed by Aberdeen-Angus and Shorthorns on Thursday, March 27th.

## Meg O'Day tops record

**MEG** O'DAY, the celebrated Leghorn hen at Rutgers University, has broken another record. Last September 30th, she produced her 362nd egg in her 365th day. This beats the previous United States record for the number of eggs laid over a one-year span of 353 eggs. It also beats the Canadian record of 360. The British candidate for the all-time record is said to have laid 462 eggs over a one-year span in 1952.

## Do-It-Yourself classes

**ALBERTA** farmers who do their own electrical wiring can brush up on the finer points at the electrification schools this month.

The classes are designed to assist farmers in planning and installing the wiring in their own homes, barns and yards. They cover the general planning of a farm wiring system, obtaining a permit, choosing the type of system and selection of materials, lighting, motors, water systems, shop tools, welders and other equipment. The classes got under way just after the new year and will continue this month from 9:00 a.m. to 4:00 p.m. from Monday to Friday. The timetable and locations are listed below:

D.A. District	Centre	Date
Coronation	.....	Feb. 10-14
Hanna	Oyen	Feb. 17-21
Strathmore	Standard	Feb. 24-28
Cardston	Del Bonita	Mar. 3-7
High River	Black Diamond	Mar. 10-14
Ponoka	Ponoka	Mar. 17-21
Wetaskiwin	Winfield	Mar. 24-28

Powdered cheese is being made in Dutch cheese factories. The cheese powder is being made for use in the home and in bakeries, in various sized packages, and is reported capable of being kept for one year.

*The Very Health Book  
You've Always Wanted  
is FREE*

**132-PAGE "HEALTH FINDER"  
TELLS HOW TO STOP  
SUFFERING. START LIVING**



New 11th Edition—just off press—contains 65,000 words, 52 special feature articles, 63 illustrations.

**Will Bring You New Health,  
New Hope — and New Life**

Tells symptoms, causes and treatment of 48 chronic ailments, including constipation, rheumatism, arthritis, nerves, colitis, catarrh, gas, colds, indigestion, etc.

The "Handy Home Doctor" brings a message of great hope to the half-sick, half-well; tells how to stop suffering and start living. "This book brought us new health," say many grateful readers. It explains the great healing forces within your body; gives hundreds of valuable health hints.

**Offer Ends on March 31**

If you value your health, you will treasure this book. Act before this 23rd annual offer expires. Originally published at \$1, this new paperback edition is specially published for free distribution. To get your copy by return mail, send in a clipping of this advt. and add 10 cents to cover mailing costs. Please write or print your name clearly.

**HEALTH SUPPLY CENTRE**

Dept. 111 120 Lombard Ave.  
Winnipeg 2, Man.

## HOW TO HAVE A RECORD YEAR IN POULTRY!

● **ORDER CO-OP  
PARAMOUNT  
CHICKS & POULTS  
TODAY!**



TOP QUALITY BIRDS AT THE  
LOWEST PRICES. CO-OP CHICKS  
MATURE FAST — PRODUCE  
FAST! ORDER TODAY FROM  
ANY OF OUR BRANCHES.

	UNSEXED 100	PULLETS 96% Gld. 100	COCKERELS 100
WHITE LEGHORN	\$15.50	\$33.50	\$ 3.50
NEW HAMPSHIRE	15.50	27.50	14.50
WHITE ROCKS	16.50	27.50	14.50
BARRED ROCKS	16.50	27.50	14.50
HAMPSHIRE—BARRED ROCK CROSSBREDS	16.50	27.50	14.50
LIGHT SUSSEX	15.50	27.50	14.50
HAMPSHIRE LEGHORN CROSSBREDS	15.50	33.50	6.50
HAMPSHIRE—LIGHT SUSSEX CROSSBREDS	16.50	27.50	14.50
No. 1 WHITE LEGHORNS	16.50	34.50	3.50
No. 1 WHITE ROCKS	17.50	28.50	14.50

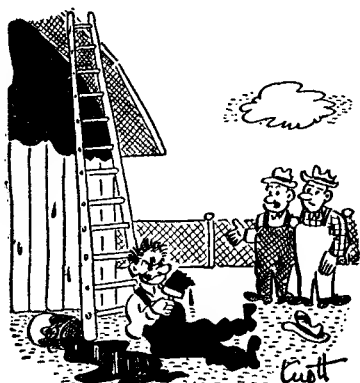
\* No. 1 Paramount Chicks are hatched from selected Government Approved First Generation Wing Banded Pedigreed Pullets and First Generation Wing Banded Pedigreed Cockerels.

Co-op Paramount Broad Breasted Turkey  
Poults priced from \$72.00 to \$82.00 per 100.

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**CO-OP HATCHERIES**  
A Division of Alberta Poultry Marketers Ltd.

**FREE CATALOG UPON REQUEST**

Branches at: Edmonton, South Edmonton, Calgary,  
Camrose, Lethbridge, Willingdon



"That new hired hand keeps fall-  
ing down on-the-job."



## Aunt Sal

*We housewives know our daily life,  
Has much variety;  
When we can help each other,  
We achieve felicity.*

Questions still hanging over from last year include these: Does anyone know of a home-made salve that is made from the leaves of the cactus plant. And I'm very anxious to hear from the woman up in the Peace River country who offered to send the pattern for the Siwash sweater that showed an oil derrick.

Q.: What is papain (or papotin)? — (Mrs. H. L. Mayer.)

A.: I hunted diligently for an explanation of this in my general encyclopedia and in that devoted to all foods, but it took Mrs. M. S. to give me the real explanation which runs so: "Papaw is a tropical fruit tree which grow some 18 to 20 feet

high. The fruit is melon-shaped. Papain is a ferment from this fruit which has the property of rendering meat tender." I still cannot answer the rest of this question which is where to obtain it? But in such cases I always contact my druggist.

Q.: We are very fond of hoarhound candy. Could you tell me where I could obtain the hoarhound to make it? — (Mrs. F. L. S., Bluffton.)

A.: Again I suggest that you inquire of your druggist.

Q.: Would it be possible to have the instructions printed on your page for men's socks knit in a circular pattern? — (Mrs. W. B., Kettle Valley, B.C.)

A.: I am sorry, but these instructions would consume too much space. Several current knitting books feature this pattern, but if you cannot find it, then write for complete instructions to: Mrs. Ivy Clark, Needlecraft Dept., Chatelaine Magazine, 481 University Ave., Toronto.

Q.: Could you give me a recipe for ice cream similar to the "bought" variety and not made with a custard base? — (Mrs. S. S., Vegreville, Alta.)

A.: Here are your proportions: Combine these:

4 cups light cream  
3 cups heavy cream



Here's REAL economy!  
real CONVENIENCE too!

**ALL-VEGETABLE**  
**Blue Bonnet**  
in the money-saving  
**3 lb. PACK**

Each delicious pound is individually wrapped. Color one pound at a time — the unused pounds stay fresh, free from ice-box odors, perfectly protected until you need them.

BB-54

1 cup milk  
1 cup sugar  
¼ tsp. salt

Any flavorings may be added, also coloring.

Q.: In the recipe for nuggets, I think there must have been an error in the printing for it called for 2 cups cake flour and then an additional ½ tsp. flour. — (Mrs. E. L. Oliver, B.C.)

A.: Yes, I'm sorry this was an error, it should have been ½ tsp. salt.

Q.: Now that the season is on us for butchering, could you place the recipes for pickled pigs' feet and pickled tongue in your useful column? — (Mrs. R. W. D., Ft. Francis, Ontario).

A.: I get very few letters from points further east than Manitoba so was pleased to hear from you, Mrs. D.

### PICKLED PIGS' FEET

Scrape and clean the feet well then sprinkle with salt and let stand for 4 to 8 hours. Wash the feet in clean, clear water. Place in hot water and cook until tender, but not until the meat falls from the bones. Pack into clean jars, filling to within ½ inch with spiced vinegar. Screw on tops and process about 90 minutes.

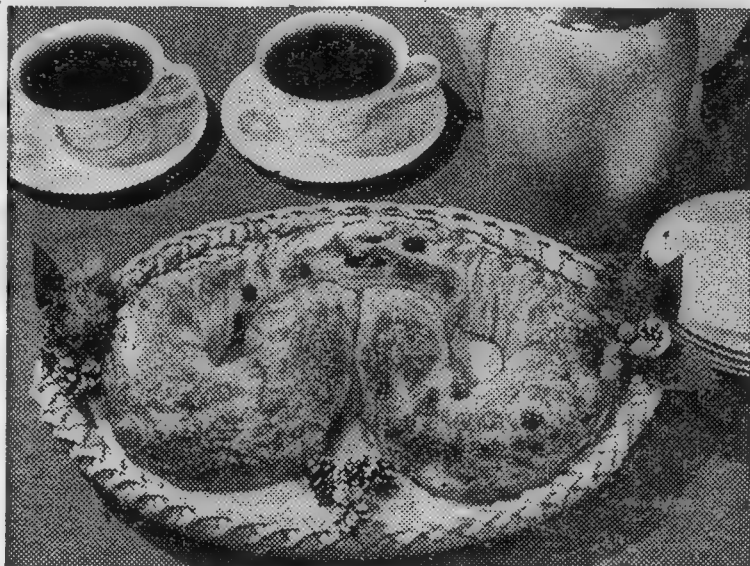
### VINEGAR SOLUTION

2 qts. vinegar  
1 red pepper  
2 tbsps. horseradish  
1 tsp. black pepper  
1 tsp. allspice  
1 bay leaf

Mix all together and bring to boiling point.

### PICKLED TONGUE

Boil tongue until partially done. Cool and remove outer skin. Pack into clean jars. Add  
(Continued on page 41)



## Here's an idea...

This recipe for Danish Twist which is native to Denmark gives a delectable tidbit to go along with the hospitality and cups of tea and coffee served when neighbors and friends drop in. This pretzel-shaped twist with a crisp, interesting topping and filled with raisins is especially good served warm, but it may also be served cold, if preferred. Served with butter, this yeast-raised coffee cake is a home-made work of art that brings a sense of accomplishment and pride to its creator.

### DANISH TWIST

Yield — 1 twist  
½ cup lukewarm water  
1 teaspoon granulated sugar  
1 envelope active dry yeast  
¼ cup milk  
¼ cup granulated sugar  
1 teaspoon salt  
2 tablespoons shortening  
1 well-beaten egg  
2½ cups (about) once-sifted all-purpose flour  
1 cup seedless raisins  
1 well-beaten egg  
Icing sugar

Measure lukewarm water into a large mixing bowl; stir in the 1 teaspoon sugar. Sprinkle with yeast. Let stand 10 minutes, then stir well.

Meantime, scald milk; stir in the ¼ cup sugar, salt and shortening. Cool to lukewarm. Stir into dissolved yeast along with well-beaten egg and 1½ cups of the flour; beat until smooth and elastic. Stir in raisins and sufficient additional flour to make a soft dough — about 1 cup more. Turn out on floured board or canvas and knead until smooth and elastic. Place in greased bowl. Grease top. Cover. Let rise in a warm place, free from draft, until doubled in bulk — about 1½ hours.

Punch down dough. Turn out on lightly-floured board or canvas and knead until smooth. Form dough into a roll about 28 inches long. Twist the roll by turning ends in opposite directions. Carefully lift the roll onto greased cookie sheet and shape into a large "pretzel" by forming the roll into a crescent then drawing ends into the arch and tucking them under to keep dough from untwisting. Brush with well-beaten egg and dust generously with icing sugar. Cover. Let rise in a warm place, free from draft, until doubled in bulk — about 1 hour. Bake in a moderate oven (350° F.) 20 to 25 minutes.

vinegar solution as quoted above or just water and 1 tsp. salt to each quart. Process in pressure cooker for 75 minutes at 10-lb. pressure or for 3½ hours in water bath.

Q.: I would like to find recipes for ice cream toppings. I cannot find them in any of my cookbooks. —(Mrs. H. H., Carstairs, Alta.)

A.: I shall give you the three that you have specified.

#### BUTTERSCOTCH SAUCE

1½ cups light brown sugar  
¼ cup water  
4 tbsps. butter  
½ tbsps. lemon juice  
½ cup chopped nut meats

Boil sugar and water together to soft-ballstage. Take from heat and add butter, lemon juice and nut meats.

#### MARSHMALLOW SAUCE

¾ cup sugar  
¼ cup milk  
½ lb. marshmallows  
2 tbsps. water

Boil the sugar and milk to thread stage. Cool and beat until thick and white. Set in boiling water and stir until thin enough to pour. Stir the marshmallows and water in top of double boiler until melted and

smooth. Pour the syrup over melted marsh. and beat together. Keep warm, but not hot.

#### PINEAPPLE AND OTHER FRUIT SAUCES

Just beat in any fruit (including shredded pineapple) into the regular marshmallow sauce.

Q.: I was interested to see the angel food pie in a recent issue, but I don't think you told us how many egg whites it called for. —(M. W., Quill Lake, Sask.)

A.: I think I'll repeat the whole recipe seeing it is short:

#### ANGEL FOOD PIE

1 cup crushed pineapple  
1 cup cold water  
1 cup white sugar  
½ tsp. salt

Mix in double boiler. Let come to boil and add 3 tbsps. cornstarch mixed in paste with little water. Cook and set to cool. When cool, add 3 beaten egg whites. Place filling in shell and cover with whipped cream and walnuts.

NOTE: — All questions sent to Aunt Sal, in care of Farm and Ranch Review, Box 620, Calgary, Alberta, will be handled in this department.

## Aunt Sal Suggests...

When you want to keep a thing in mind,

Put it down in black and white;

That way you won't forget it...

I'm sure you'll find I'm right.

MAYBE it is just a hangover from my school teaching days but ever since that time I've had a great fondness for jotting things down. I've taken a lot of kidding about this habit of mine and for years they were dubbed 'mama's notes' and my family knew they never dared destroy them.

Last year while I was in California we were driving along a

busy highway when outside of a big real estate office I saw a sign which read, "We Have Multiple Listings" and I laughed as I muttered to myself, "You've got nothing on me."

Years ago a very wise man told me never to try to burden your mind with too many details... make a note of them. Of course there is such a thing as losing those pencilled lists too... and that isn't very nice either. Of course every woman makes shopping lists and such but I make lists every day of my life... and refer to them too. For instance first thing in the morning while dallying over



Lloyd Knight Photo.

Aunt Sal takes her own advice: "Jot it down as soon as it comes to mind, and then you can't forget."

New idea! "Yeast-Riz" crust makes mouth-melting



## TUNA-ONION BROWN-UP



### "YEAST-RIZ" CRUST

Scald ½ cup milk. Stir in ¼ cup shortening, 6 tablespoons granulated sugar and ¼ teaspoon salt. Cool to lukewarm.

Meantime, measure into bowl ¼ cup lukewarm water. Stir in 1 teaspoon granulated sugar. Sprinkle with contents of 1 envelope Fleischmann's Active Dry Yeast. Let stand 10 minutes, THEN stir well. Stir in lukewarm milk mixture. 1 well-beaten egg and 1½ cups once-sifted all-purpose flour; beat until smooth. Work in an additional 1¼ cups (about) once-sifted all-purpose flour. Knead. Grease top. Cover. Let rise until doubled in bulk—about 1½ hours. Punch down; divide into 3 pieces. Roll each into 10-inch circle and press firmly into 9-inch pie pans. Crimp edges. Brush with 1 slightly beaten egg white. Let rise until doubled in bulk—about 20 minutes. Prick with fork. Bake in

moderate oven, 350°, 8 minutes. Do not brown. Fill and bake—or cool, stack and wrap partially-baked crusts in foil and refrigerate up to 10 days. Yield: 3 pie shells.

### TUNA-ONION BROWN-UP

Melt 2 tablespoons margarine in a large frying pan. Add 2 cups thinly-sliced onion; cook until tender. Add 1 can (approx. 7 ounces) tuna fish (drained and flaked)—or use 1 cup diced cooked poultry, 4 sliced ripe olives (optional), 1½ teaspoons salt and ¼ teaspoon pepper; heat well. Meantime, scald ¾ cup milk. Stir hot milk into 2 beaten eggs; mix in 2 cups shredded Swiss or old cheddar cheese (½ pound). Turn hot tuna mixture into one "Yeast-Riz" Crust; pour hot cheese mixture over it. Bake in moderate oven, 350°, 20 to 25 minutes. Serve hot. Yield: 4 to 6 servings.

## A week's work in a wink!

Make light, tender "Yeast-Riz" crusts on Tuesday... and store them in the refrigerator till needed. Fill one with tangy tuna filling on Wednesday... one with beef stew on Saturday... another with chicken a-la-king on Sunday. They brown in mere minutes... are always wonderful when you use Fleischmann's Active Dry Yeast! If you bake at home, keep several on hand for tempting main dishes... at a moment's notice!



NEEDS NO REFRIGERATION  
ALWAYS ACTIVE, FAST RISING  
KEEPS FRESH FOR WEEKS

*It's still...*

# IMPORTANT

Since the turn of the century producers have been convinced they had to co-operate to survive. They developed many producer co-operatives to enable them to process, handle and sell their products more effectively and at the same time raise standards of quality, reduce waste and loss and in many cases they came to own their own plants for processing and storing.

There are now over a thousand producer co-ops. in operation — providing valued service and considerable savings to their members. We believe that the need is as urgent today as it was early in the century for our primary producers to develop and strengthen their own co-operatives if they are to improve their standard of living and combat monopoly.

Producer co-ops. in Western Canada have an enviable reputation for efficiency of operation service and savings. The Central Alberta Dairy Pool stands high and proud among Western co-operatives and its service extends throughout Central and Southern Alberta. No producer of dairy and poultry products is too far away from a branch of the Central Alberta Dairy Pool if he lives in Central or Southern Alberta.

## Important Notice to Members

Your Directors have declared a 4% patronage dividend for 1957 which will be placed to your credit. In addition there will be a CASH PAYMENT to the value of 4% of your credits as shown in your book up to December 31, 1956.

Please send your book to Red Deer as soon as possible. They will be returned with your new credit entered and a cash voucher for the amount you are entitled to.

It will take us a little time to complete all the books—please do not write for return of your book — it will be returned as soon as possible.

## Central Alberta Dairy Pool

*"Owned by those it serves"*

with branches throughout Central Alberta and in the south  
at Calgary, Brooks and Lethbridge.

a second cup of coffee I spend five minutes outlining my duties for the day... and I don't make the list too lengthy for at that early hour we're apt to get too ambitious and think we can do enough to stump a super-woman... just write down the things that really have to be done, and then if we can squeeze in extra duties we're so much ahead of the game. When my ten year old grand daughter is visiting me she takes such a keen interest in this 'queer' habit of mine and she gets right into the act and places her initials opposite the items that she has to help with and how jubilant she is when she has finished her share and she has that real feeling of accomplishment!

I referred last month to a letter that I received from a lady who wants to be called 'Old Timer'. I don't know whether she has ever stooped to such a childish pursuit as 'writing notes' or not but I do know that her letter was chuck full of fine ideas that she had tried out successfully in her home. Because this letter was so full of down to earth wit I shall quote parts of the letter in her own words.

### Old Timer's Letter

When I hear you mentioning the mixture of flour and sugar in pie filling it makes me want to yell blue murder for how I dislike the flour in pies. I don't think I ever used it and when I meet it in restaurants or in

others' homes I try to eat it... but don't enjoy it.

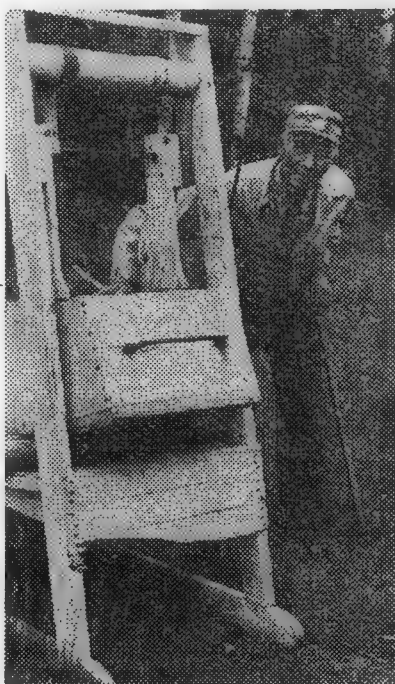
And then she explains what she substitutes instead. She saves all the pieces of dry bread or buys a loaf of bread especially for this purpose and lets it dry. Then she puts it through the food mincer and a second time through the finest cutter, then through the flour sifter and bottles it for future use. It is maybe a spot of work getting it ready but there it is when she wants to crumb veal chops or fish or place a topping on cream dishes and such. And pies... definitely in pies, (for that was what drove her to write me in the first place, remember?)

Before adding the filling to the crust she sprinkles a few crumbs on the bottom crust then comes the filling and all around the edge she sprinkles a margin of crumbs. Plops on the top crust and she says there isn't a wayward drop of juice dares to drip out. And just in case she feels I might feel a little hurt at her presumption of giving me her idea she adds in closing, "I am a great admirer of Aunt Sal"... well I'll say right back to her, "I'm a great admirer of Old Timer" and all ladies like her who have originated successful methods of doing things well in their home duties.

Bye bye for now... and every good wish.

Aunt Sal.

## Can you name it?



This odd-looking gadget was designed to help grandmother with her work around the house. It is a primitive hand-made mangle used by milady to iron all her heavy linen sheets. You simply rolled the sheet on a log and put it on the platform beneath the hanging box. The box — filled with stones to the required weight—was then swung back and forth by the handle like a swing, and presto... out came the linen all neatly ironed. (Well, almost ironed.)

This mangle is part of the display at the Manitoba Memorial Museum, near Austin.

## Winter fire fighting

FROZEN water won't put out fires, but salt water might. Just a few pounds of salt and an old barrel can give fire hoses instant access to the farm pond water even when it may be covered by thick ice.

Fire officials say that many farm ponds become fire traps when needed most — in winter. They freeze so solid that by the time a hole is chopped through the ice to the open water, the fire is out of control and the house and barn in flames.

One way to avoid this is dissolve about eight quarts of salt in about a third of a barrel of water and place it in a deep part of the pond where the hoses can reach it. Cover the barrel to keep the rain or snow from diluting it, and put up a marker to help locate it in deep snow. In case of fire it takes only a few seconds to break through the wooden barrel to get at the water.

In case hoses aren't available, a few pounds of salt (about four pounds per gallon of water) will keep fire barrels and buckets from freezing except in the very coldest weather. This instant access to water may save property, livestock and human life by providing the water when it is needed most, that is, at the very beginning of the blaze.

*The Farm and Ranch Review is one of the best read farm journals. It has real advertising appeal.*

## More free trade?

**T**HE Free Trade ideas of the European Economic Union may be spreading. Now the Baghdad Pact nations are studying the possibility of establishing a free trade area among themselves. The economic committee has set up a working party to study the matter. Members of the pact include the United Kingdom, Iran, Iraq, Turkey and Pakistan.

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### A.M. NEWS . . .

1:00	—	1:05
3:00	—	3:05
5:00	—	5:05
6:15	—	6:20
6:45	—	6:50
7:15	—	7:20
7:45	—	8:00
8:30	—	8:35
9:00	—	9:05
10:00	—	10:05
11:00	—	11:05

### THE WORLD TODAY

12:15 — 12:50 p.m.

### FACTS ABOUT FARMING

1:20 — 1:35 p.m.

### P.M. NEWS . . .

3:00	—	3:05
4:00	—	4:10
5:45	—	6:10
10:00	—	10:15 p.m.

### THE WORLD TO-NIGHT

11:00 — 11:30 p.m.

**CFQC**THE RADIO HUB OF SASK.  
SASKATOON

**"EXPORT"**  
CANADA'S FINEST  
CIGARETTE

## Pasture makes milk

**G**OOD pasture alone is able to keep milk production up. Pasture trials at Purdue University show that a daily milk production of more than 50 pounds per day per cow may be maintained on pasture alone. In Illinois tests, one acre of good pasture was equal to the feeding value of 510 pounds of grain mixture, 2,017 pounds of hay or 3,737 pounds of silage. Of course, that's Illinois pasture and not pasture of the Canadian prairies.

## Control coffee exports

**S**EVEN Latin American nations have signed an agreement to control coffee exports.

The agreement is designed to promote a "well-regulated, stable market under conditions fair to both producers and consumers". No suggestion is made that with control of exports the coffee-producing countries could also control prices. Those signing the agreement are Brazil, Columbia, Costa Rica, El Salvador, Guatemala, Mexico and Nicaragua.

## Durum surplus growing

**A**FTER the rust epidemics on the Eastern Prairies Durum is bouncing back to a surplus.

When Manitoba farmers were forced out of durum production in the face of the rust, Western Saskatchewan and Southern Alberta boosted production to meet market demands. With wheat already in surplus, durum acreage was increased as a profitable operation, until a surplus gradually developed. Now that the new rust-resistant variety Ramsey is available, Manitoba and Eastern Saskatchewan can again get into durum production to add to this growing surplus.

The cerealist at Lethbridge Experimental Farm, Hugh McKenzie, warns that the new interest in the rust-resistant Ramsey has resulted in some fraudulent claims being made about its performance. He denies that Ramsey outyields Stewart, but states that their yields are about equal. Nor should farmers be led to believe that if they purchase certified seed they will be able to sell registered Ramsey the following year. Seed purchased from Certified stock cannot be sold as registered.

Mr. McKenzie also denies any claim that good markets are assured in the United States, Australia and South America. There is no basis for this optimism about export markets in these countries.

Ramsey is mainly important in Manitoba, and the rust areas of Saskatchewan, but it holds no advantage for farmers in areas where rust is no problem. In Alberta, Ramsey has no advantage over Stewart, except possibly for slightly stronger straw.

## British butter sales ahead

**B**UTTER production in Britain exceeded sales of margarine, in the first six months of last year, by 34 million lbs. During the same period of the previous year butter sales lagged 67 million pounds behind those of margarine.

## Fishmeal for sows

**B**RITISH agriculturalists say experiments show that the farrowing and rearing of sows which have no access to grassland is improved by giving more protein during gestation and suckling periods. A better effect in a second pregnancy was noted.

Nine-month-old gilts were taken off grass a month before service and kept in yard during gestation. One group was given no protein supplement, the other 10 per cent fishmeal. More pigs were born per litter to the gilts given fishmeal and the litter losses were lower.

In second litter trials, when groups fed with no fishmeal, or with 7½ or 15 per cent fishmeal, those receiving 15 per cent produced more pigs and a higher total litter birth weight, and weaned two more pigs per litter. Their litters also had as high an average weaning weight as the small litters from sows on the low protein diets.

## Specialty crops in Manitoba

**M**ANITOBA'S specialty crops last year presented a brighter picture than its cereal crops.

The beet crop ran around \$3,000,000, with beets running about 10 tons to the acre.

Farmers in southern Manitoba who grow sunflower seed for the plant of Co-Operative Vegetable Oils at Altona had better than a million-dollar crop. The production from about 27,000 acres were of oil varieties, while about 8,000 acres produced a large seed variety grown for roasting and packaging for sale commercially.

A crop from about 27,500 acres of rapeseed was successfully grown all over the province, even as far north as the Pas. Most of this crop is sold to the oil processing plant at Altona.

About 60% of Canada's field pea crop is grown around Portage la Prairie. About 17,000 acres was grown with yields averaging 20 bushels to the acre. A large part of this production is sold in Quebec, with exports going mainly to the West Indies.

A number of lesser specialty crops were grown last year: some buckwheat, 11,000 acres of shell corn, 400 acres of soybeans, 300 acres of mustard, and even 125 acres, tried for the first time in Manitoba, of canary seed.

## Quick farm accounts

**K**EEPING proper farm accounts takes even less time than we thought. A half hour a day to keep the books was suggested earlier, but Jake Brown, the Saskatchewan Farm Management Specialist, has been quick to point out that once a proper and simple system is set up the accounts can be kept in order in much less time each day. Mr. Brown says that the total time required should be only about one-half hour a week.

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## FERGUS LANDRACE SWINE FARM

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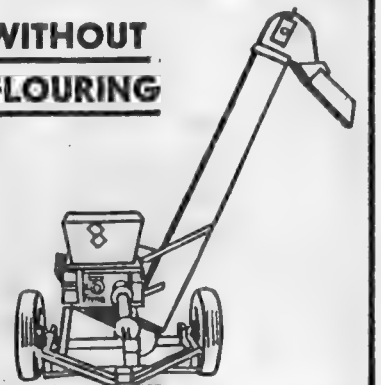
## FLOURY FEED ALL BALLED UP?

## HENKE

## ROLLER MILLS

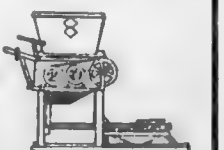
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## Egg prices

Dear Sir :—

I noticed in a recent issue of the Farm and Ranch Review a breakdown on turkey prices showing the loss of a farmer on raising a turkey for market.

In case you might be interested I am enclosing a couple of slips showing the returns to me on 32½ dozen eggs. These eggs were gathered daily, kept in a cool place and shipped once a week...

This is not an isolated case. I can produce copies from other farmers in this district. You will note the total price for 32½ dozen is \$6.56 less transportation charges of \$1.16 — net, \$5.40, or less than 14c a dozen. Now, what I'd like to know is where does Gardiner's floor price of 38c per dozen for grade A large apply here? To begin with the produce houses will see to it that the number of grade A large will be very small in a shipment from the egg producers.

If you can figure out a way for farmers to continue to stay solvent by such ridiculously low prices as we receive for many of our products, kindly pass it along will you?...

Yours truly,  
Ralph M. Thornton,  
Sedalia, Alta.

## Editorial changes?

Dear Sir :—

As a long-time subscriber and always an interested reader of its editorials, I had been astounded at the changes from the time of its management since the time of the late Editor Mr. Nesbit and before that back to its founder Charles Peterson. Practically all your writings have been opposed to the ideals and labours of those pioneers, backed by a majority of the farm people of the Prairie Provinces...

However, with the arrival of the January edition I perceive a marked change of policy for which I sincerely congratulate you. Perhaps I was wrong about your age, but had it down to inexperience and hope that your future editorials will more nearly express the ideas of the farm people.

Yours sincerely,  
S. M. Aher,  
328 S. Ancaster Crescent, E.C.  
(Formerly Rumsey, Alta.)



"My wife's got a temporary job working in town."



## Farmers' rights

Dear Sir :—

I must say the Farm and Ranch Review is well worth the price; many times over, believe me.

I just finished reading the letter about the parking meters and agree with the man who wrote that letter. The farmer should have the same right to his own property that the officials in any city or town have to the said property.

When the hunting season... opened... the gangs got bigger and through time wrecked field(s) of barley. Many times one is fined over this, but the farmer always gets the dirty end of the stick. No pay for the damage, but the court gets well paid. They sit there and give a few orders and "pay \$15.00, please," or whatever it may be and the farmer gets nothing...

No one has come up with a solution to protect the farmer, not even the law courts of police...

Yours truly,  
Lorne Duffus,  
St. James, Winnipeg.

## Warped thinking

Dear Sir :—

Judging from recent editorials, many people in responsible positions are still obsessed by warped thinking.

Especially in protection of present-day capitalist society calling it freedom where private gain has created monopolies and cartels thereby encroaching on the freedom of ordinary people and even governments.

Whereas freely elected socialist governments have constant freedom to express their views and have them implemented democratically. It's only a capitalistic "state" that forces people into unemployment, starvation amongst plenty and encroachment on people's freedom.

Even I am having difficulty in having my views printed in your paper.

Sincerely,  
William Kachur,  
Lanigan, Sask.

(Reader Kachur's warped thinking has caused him to warp the truth. He has had no difficulty in having these views printed.—Editor.)

## Deficiency payments

Dear Sir :—

... I suggest a method of deficiency payments on products used in Canada. These be paid so as to bring farm produce to parity level...

... By reducing the number

of farmers on the land does not solve the farm problem. For every time you remove or induce a man off the land we lessen the market for urban goods. He also becomes a producer of goods and services in competition with others. By using deficiency payments it would not be necessary to put on tariffs. The food prices could follow world levels and the nation as a whole could make up the difference... We are applying a good many deficiency payments today, such as old-age pensions, hospital payments, the school system is built around this method and the people who are serving the public are not asked to supply anything more than their personal service. While the farmer who has a large investment is asked to produce food at a price so everyone can obtain it regardless of circumstances or income. Also by this method it would be possible to stop other businesses from going into farming... to build up factory farms and competing with the family farm...

Yours truly,  
Wallace Marr,  
Millet, Alta.

## More Socialist triumph?

Dear Sir :—

... a correspondent has a few statements attempting to belittle (Saskatchewan's) successful completion of its share of the Trans-Canada Highway.

Dealing with his first contention that "the terrain was the easiest in Canada" ... I would say there is little to choose in all three Prairie Provinces insofar as road grading is concerned. Eastern Manitoba is a little tougher. So is the Western 50 miles of the route in Alberta, but it is doubtful if either Alberta or Manitoba's share will be finished in '58, and Saskatchewan has the largest mileage.

Next assertion: "Unemployment in Saskatchewan and a big pool of unemployed to draw from". Most everyone knows that modern road construction is a matter of huge dirt moving equipment, changing shifts and comparatively few men. Every season since Trans-Canada was started everyone in the construction season who wanted work could get a job at the highest wage and salary levels in Canadian history.

Third contention: "People overtaxed for the road." Surely the terms of construction costs shared by the Federal Government are known to most people, and this has but little relation as between the costs of the highway and taxation in any province...

Fourth contention: "Less traffic and less rain." Fact is that there is very little, if any, difference in traffic density as between Calgary and Moose Jaw, or the Brandon-Winnipeg area... Precipitation conditions over the whole route... were very similar.

Yours truly,  
Jack Sutherland,  
Drawer 39, Hanna, Alta.

Dear Sir :—

Silence would have been golden in comparison to the complete lack of enthusiasm expressed by Stan Qbodiach regarding the flying colour achievement of Saskatchewan...

It is amusing the way this individual contradicts himself. On one hand he states that "there is so much unemployment in Saskatchewan that men were flocking for jobs to build it." Immediately following I quote "the few people that are in the province were over-taxed to get that highway complete."

One would get the impression that this portion of the highway was built by a pool of unemployed men manned with picks and shovels. Furthermore, the few over-taxed should be a brilliant example to the rest of Canada in regards to what industrious people can achieve. Every full-blooded resident of Saskatchewan has cause for rejoicing at this "starring first" achievement. Any attempts to belittle it merely shows poor taste, for facts speak for themselves every time!

Yours truly,  
Minnie Mack,  
Langenburg, Saskatchewan.

## Subsidies only solution

Dear Sir :—

... the cost-price squeeze and the disposal of surplus production. I note with regret that you did not suggest a solution. After reading another editorial, "Shoals Dead Ahead" ... I doubt if you can provide one. Here you make your opposition to any further increase in government subsidy or interference very plain... Proposals advanced by farm organizations, parity prices, the idea of a soil bank, deficiency payments, all depend for their success on subsidization. I believe that the farm population can only be assured of a reasonable standard of living by these or similar measures. But let's be honest about



"Swim faster, Dear! We don't want to pay any more rental than necessary!"

it; insofar as they necessitate an increase in government action, they constitute socialism . . .

I must infer you favor a return to a more unrestricted economy, in which case your concern for agriculture is misplaced. Free enterprise will take care of it. The law of the jungle, which is free enterprise, will decree that the strong of the industry shall survive, and the weak, even though they number 150,000 (farmers) will cease to be. I cannot think that this is your solution, but if not, what is?

Yours truly,  
Stuart McRae,  
Scapa, Alta.

Dear Sir:—

I would like to compliment you on your editorials in the last issue of your paper. In this issue you write like a champion of the agricultural industry while in the previous issue your editorials simply stunk. May I express the hope that future issues will not repeat that kind of damaging propaganda.

Re, letter by Rev. Charles Evans, of Estevan, Sask. . . . When he states "the CCF government has neglected practically all other projects of road building in order to complete this one . . . he isn't telling the truth . . . This Province now has thousands of miles of excellent all-weather roads, both black top and gravel, and we are in the process of building a municipal grid system of splendid

roads with up to 65% of the cost being paid by the Provincial government. Why not be honest about it, Mr. Evans?

Yours truly,  
M. H. Feeley,  
Preeceville, Saskatchewan.  
(Readers are reminded that all letters to the editor must be signed before being published. Names will be withheld at the request of the writer, but they must be signed before the editor will give them any consideration. Please be brief. Lack of space prevents many letters from being published in their entirety. — Editor.)

### Clean seed scarce

THE cleanest wheat seed in Saskatchewan comes from stationary cleaning plants, according to a survey conducted by the agriculture department. In the survey over 47% of cleaned wheat failed to make acceptable commercial seed. The dirtiest seed continues to come from country elevators with about 55% of grain cleaned there rejected. Portable plants had a poor record this year with 46% rejections. None of the seed cleaned in stationary plants was turned down. Only 3.5% of seed samples were registered and certified and of the 51% of seed samples accepted for seed only 8.6 graded number one. The Department feels that farmers should buy more registered and certified seed to renew stocks.

### Soil must have organic matter

EROSION is not the only soil problem. Soil may remain where it belongs, but if it is deprived of essential plant foods, crops dwindle and the farmer suffers financially.

This decline of fertility is more rapid on irrigated soils. When they have an abundance of water crops feed hungrily and the nutrients are quickly removed from the soil. The use of fertilizers to replace nutrients is not enough. Organic matter is also needed.

This is a problem that has been studied at the Lethbridge Experimental Farm, and it has been found that when rotation included pasture the matter is not so serious; where cattle are being fed it is not too important since organic matter in the form of manure is being returned to the soil. But farmers selling beet tops, peavine silage, etc., are taking everything from the soil and giving nothing back. When the organic matter eventually goes trouble begins. Soil without organic matter becomes increasingly difficult to manage. Heavy soils become hard to cultivate; lighter soils lose their moisture retaining and fertility-holding capacity. Unless manure is available grave consideration should be given to plowing back residue crops rather than disposing of them year after year.

### Fishy flavour in eggs

THE most commonly observed off-flavour in eggs is described as a "fishy flavour". Poor feeding practice on the part of the producer is frequently blamed for this condition. The Experimental Farm, Nappan, Nova Scotia, points out that this is unfortunate, since in most cases off-flavours in eggs is acquired after the eggs leave the producers.

Too much fish oil or oily fish meal is very rarely the cause of off-flavoured eggs because much larger quantities of fish oil and fish meal would have to be fed than is now included in laying rations. Experimental work has shown that up to 20 per cent fish meal had no effect on egg flavour. Nevertheless, fishy flavour in eggs does occur and is apparently due to some metabolic disturbance in the bird. Birds affected with this disorder have a distinct odour to their breath. Since removal of these birds from the flock is not practicable, some "fishy" eggs will probably always appear on the market.

The off-flavour is primarily because eggs will take on odours and flavours when stored close to many strong smelling and oily materials. In addition, as eggs get stale, off-flavours seem to be accentuated so that stale eggs are frequently the cause of complaints about flavor.

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## Fewer farmers more food

ONLY 12% of the population of the United States, or just over 20,000,000 now live on farms. This includes millions of people living on part-time residential, or non-commercial farms. This is a drop of 1,861,000 in farm residents since 1956, and is 4,700,000 less than in 1950.

At the same time it was claimed that 20% fewer farm-ers, working less time, are pro-duc-ing 20% farm products than were produced 10 years ago.

## British cheese in U.S.

THE British specialty cheese-makers are eyeing the American cheese market.

The British have hopes of get-ting their specialty cheeses into the U.S. under specially reduced duty rates. The U.K. Milk Marketing Board says that other European specialty cheeses have been well received in the U.S., and now the British want into the market. The board would like to ship the fol-lowing cheeses: Cheshire, Dou-ble Gloucester, Wensleydale, Leicester and Blue Stilton.

## Fighting flies with color

IT'S a well known fact by ento-mologists that flies prefer yellow to blue light. They sug-gest, therefore, that dairies and stables be painted blue on the inside as an added deterrent to the house fly and the diseases it spreads. Flies are thereby dis-couraged from entering open doors and windows of buildings painted blue on the inside.

## Far eastern Co-ops.

CO-OPERATIVES are being encouraged and even spon-sored by the government of Thailand, in an effort to assist more farmers to own and im-prove their land.

Plans by the government call for expansion of credit societies to help farmers repay old debts and to purchase land; land im-provement societies to bring farmers together in groups for irrigation, fertilization, me-chanization and other similar projects; and colonization socie-ties for opening up new lands.

## Champion Jerseys

TWO Jersey cows from Alber-ta have been awarded 4,000-lb. certificates. They are Rocky-view Standard Man —181081— and Rockyview Standard Beu-lah —171377—. Both cows were bred by H. H. Langeway, Cal-gary, Alta., and are owned by Mrs. A. B. Longeway, Calgary.

## More hay for Manitoba

MANITOBA farmers have not been getting the best stands of brome grass on their high limestone soils. A variety test was carried out at the Illustra-tion Station at Grandview to see if a suitable substitute for brome could be found ... and it was. Intermediate wheat-grass seems to be the answer. Yields in tons of dry matter

per acre — either pure or mixed with alfalfa — were consistent-ly higher for intermediate wheatgrass than for brome, meadow fescue or crested wheatgrass. The intermediate wheatgrass proved decidedly su-perior to the others and is recommended for the high lime-stone soils of Manitoba.

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At a recent Government Advanced Registry Test, our sow Davern Baron-ess 10K completed the highest score for a Landrace with a total of 95%. As the first breeder to endorse these Tests for Landrace swine, Davern makes regular submissions for test with con-sistently good results. Only by strict culling and breeding methods are these results obtained. Send for your copy of the new Davern Landrace brochure today.

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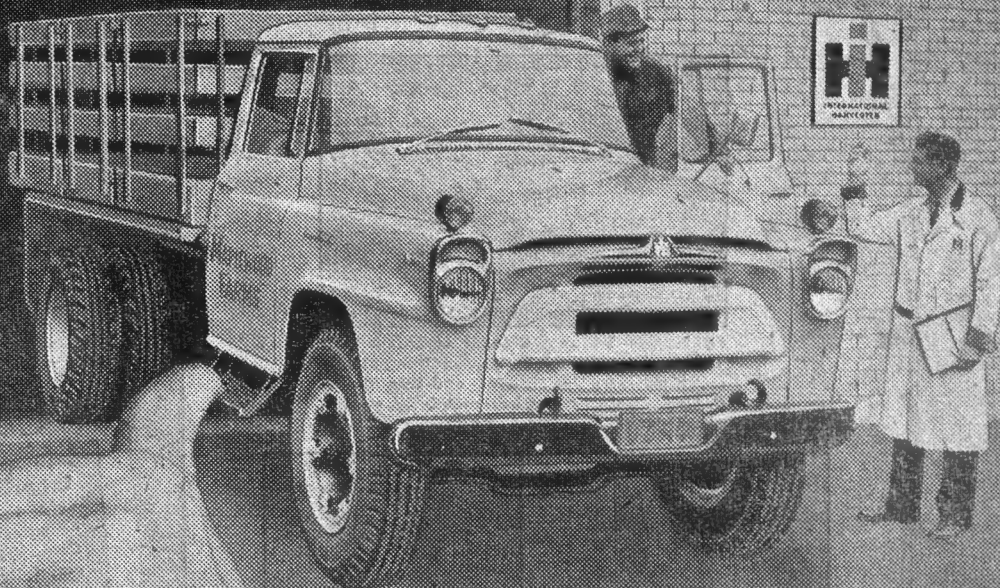
## Solution To Crossword Puzzle

D	A	N	T	E	S	A	L	E	M	F	A	R	A	D	P	R	O	B	E
U	R	I	A	L	A	R	E	N	A	I	M	A	G	E	R	I	V	E	D
R	A	M	I	E	A	O	S	N	U	I	S	O	O	H	I				
E	R	I	E	A	R	R	E	S	T	A	S	C	O	T	M	E	T	A	L
S	A	N	D	A	L	A	D	I	S	L	E	T	I	M	P	R	O	V	E
S	T	A	R	I	A	S	C	O	L	D	S	T	E	T	P	E	S		
A	M	A	Z	O	N	P	R	A	T	E	C	H	U	T	E	S	I	R	E
S	E	N	A	T	M	O	O	R	E	C	H	O	R	E	S	T	R	A	W
E	D	E	N	L	O	O	N	S	F	L	A	P	S	F	L	E	E	C	E
M	E	T	P	I	L	L	S	L	I	A	R	S	C	O	U	R	S	E	R
S	A	V	I	N	G	S	M	A	R	S	H	B	E	A	T	S	W	E	D
A	D	O	R	E	S	B	E	N	E	T	B	L	E	S	S	P	E	R	U
G	A	L	E	S	W	I	N	D	S	P	L	A	N	E	P	O	I	S	E
A	M	E	N	C	O	R	D	S	C	L	A	M	S	B	A	R	R	E	L
S	W	O	R	D	S	G	L	A	C	E	D	A	R	E					
A	P	A	R	O	S	S	C	R	A	N	K	P	A	L	S	E	P	I	
W	A	S	P	I	S	H	B	R	I	N	E	I	R	L	E	S	S	O	N
A	W	A	I	T	I	L	I	U	M	T	E	N	E	T	S	H	E	R	S
R	N	L	E	P	I	L	I	M	A	V	F	A	I	O	T	I			
D	E	T	E	R	E	R	A	S	E	R	O	G	E	R	T	R	E	A	D
S	E	N	D	S	D	E	T	E	R	Y	E	A	R	N	A	N	G	L	I



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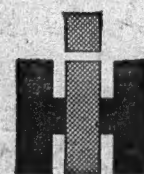
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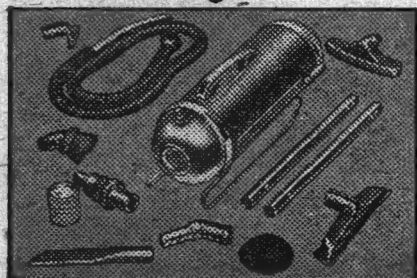
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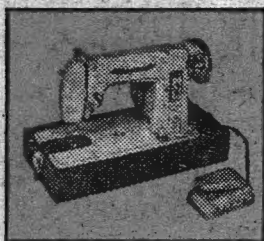


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Last year's **GRAND PRIZE WINNER**, Mlle. Cecile Baker (left) of 1715 Elgin Ave., Montreal, Quebec, accepts the keys from Toronto's Miss Byline, Elaine Bishenden, for this brand new 1957 Monarch Lucerne. She topped more than 20,000 other contestants.



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1. The first prize is a grand prize to be awarded in June, 1958. All "CARS" Contests end May 31st, 1958. This Contest closes Friday, March 7th, 1958.
2. This Contest will award choice of "Monthly Prize" to winning entrant.
3. Thousands of dollars in consolation prizes will be awarded to most accurate entrants each month.
4. All winners in (2) and (3) are eligible to win the top "Grand Prize."
5. Only one entry per person allowed. You must be 18 or older and a resident of Canada to be eligible for prizes.
6. Our employees and those of our Advertising Agency are not eligible.
7. Decision of judges is final. All entries become the property of President Electric Limited.

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Count all the cars shown. Count partial cars, too. Mark your total on the coupon. Fill out and mail in.

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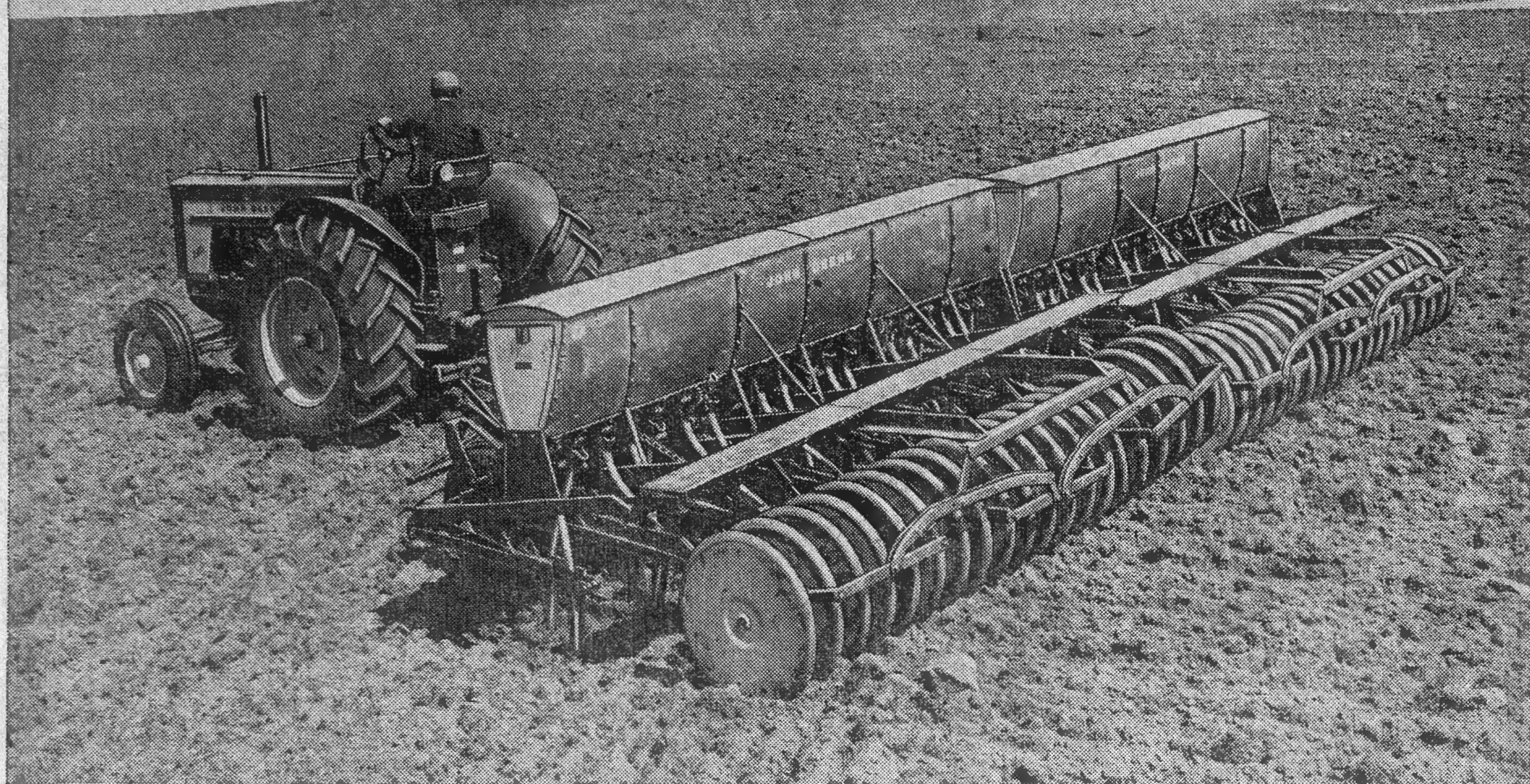
Count the cars today! Send in your answer on this coupon in time to WIN!

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AS a grain farmer, you know too well what improper planting methods can cost—not only in the way of poor stands and profitless yields—but, even more important, in the way of soil losses that may never be recovered. To cut the seriousness of both of these problems to the very minimum, you will want to do your planting with one of the John Deere Grain Drills designed especially for the proper planting of all grains in Canadian soils.

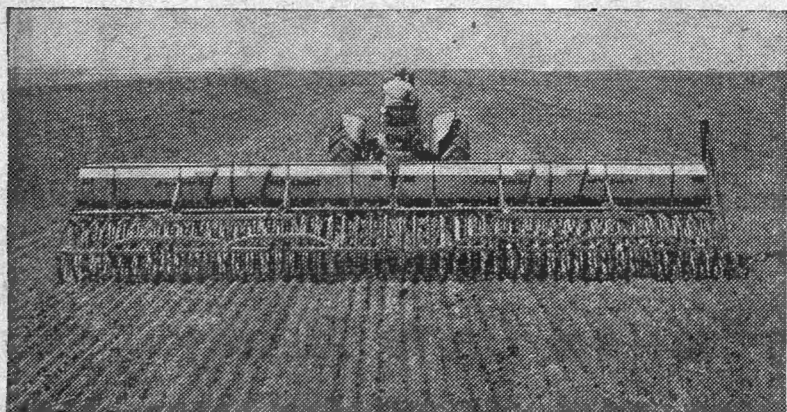
But, because even local soils and planting methods differ considerably, John Deere offers a complete line of drills from which you can choose the one that matches your planting methods best. For instance, a big favorite in western Canada is the "LZ-A," shown in the large photo above, available either as a mulch-hoe drill with 7-inch spacing or as a lister grain drill with 14-inch spacing. Whichever you choose, you can be sure of placing the seed properly in moist soil without

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For a regular press grain drill, you can do no better than the popular Model "LL," shown below. The "LL" can be equipped with a choice of several types of furrow openers to give you the exact type of placement you desire. Its large press wheels pack the soil firmly over the kernels, where they can safely germinate and develop into firm, even stands of top-quality grain.

Of course, the complete John Deere line includes fertilizer grain drills, plain grain drills, and plow-press grain drills—all available in a variety of sizes and with a wide choice of furrow openers. All can be equipped with grass-seed attachments and all can be equipped with fertilizer attachments, except the "FB-A," which has a built-in fertilizer section.

*For the land's sake—and yours—plant with a John Deere.*



In the large photograph above, two "LZ-A" Mulch-Hoe Drills work side by side. They are equipped with the new John Deere Multi-Hitch, available at your John Deere dealer's. Here, the "LZ-A" is equipped with hoe-type openers and solid press wheels and is set for 7-inch spacing.

In the photograph at left two "LL" Press Grain Drills are hitched side by side by means of the same John Deere Multi-Hitch.

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